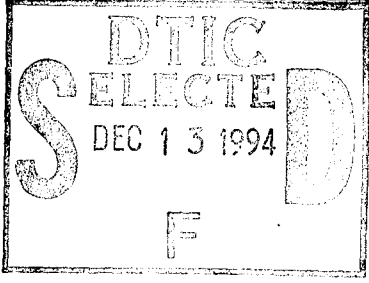


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**FACTORS AFFECTING THE MOTIVATION OF SKILLED
CRAFTSMEN IN THE UNITED STATES AIR FORCE**

by

TIMOTHY WAYNE BENTLEY, BS

THESIS

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Science in Engineering

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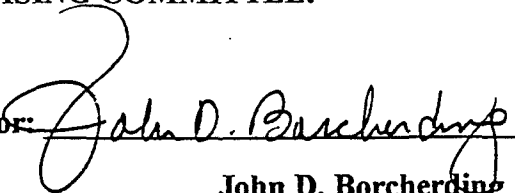
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**FACTORS AFFECTING THE MOTIVATION OF SKILLED
CRAFTSMEN IN THE UNITED STATES AIR FORCE**

APPROVED BY

SUPERVISING COMMITTEE:

Supervisor: _____


John D. Borcharding

Supervisor: _____


Richard L. Tucker

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Date Submitted: November 15, 1994

ABSTRACT

Factors Affecting The Motivation of Skilled Craftsmen in the United States Air Force

by

Timothy Wayne Bentley, M.S.E.

The University of Texas at Austin, 1994

Supervisor: John D. Borcharding

With the current defense spending cuts in the Department of Defense it is becoming increasingly important to get the most productivity out of all remaining personnel. Most United States Air Force installations are maintained by crews of military and civil service civilian skilled craftsmen. These craftsmen perform work ranging from maintenance to minor construction and serve a vital role in keeping the Air Force running. The motivation of these workers is a key ingredient to make them as productive as possible. This thesis attempts to find out from the workers what factors affect their motivation and offer some recommendations to managers. Data was collected through 23 in depth field interviews with skilled craftsmen at three different Air Force Bases. Interview results were analyzed for trends and conclusions and recommendations were related to the literature review on motivation theories.

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CHAPTER ONE - INTRODUCTION

1.1 Purpose

All Civil Engineering Squadrons in the United States Air Force perform a combination of maintenance work and light construction work, in order to keep the base functioning properly. This work could range in scope from changing out a valve all the way up to renovating a large facility. As a Civil Engineering Officer, the author realized the catalyst of a good organization were the skilled craftsmen.

The skilled craftsmen consist of both military members and civil service civilians working side by side to perform the task. These craftsmen differ in age, experience, training, background, etc., so managing such a diverse group of people can be a challenge. Since people are the most valuable resource, in the Air Force, learning more about effectively managing them is highly important. Increasing the productivity of craftsmen saves time and money and makes the craftsman feel better about his or her job. One of the key ingredients behind increasing productivity is the attitude and motivation of the craftsmen. Each craftsman is human and each one is motivated by something.

Motivated people tend to increase productivity which saves time and money. With the current and future fiscal constraints in the Department of Defense it is becoming increasingly important to find ways to save money and work more efficiently. Prior to embarking on this study, the principles of Total Quality Management (TQM) were examined and one of the main themes of TQM is hearing what the worker has to say. Therefore this thesis focuses on the craftsmen, what they think about their jobs, their bosses, and how they are treated. Many researchers and writers have studied management and motivation techniques and given their opinions on how it should be done. Although many of these experts have great ideas in different areas, few have studied the construction type craftsmen. These craftsmen perform a difficult job, in a sometimes harsh outdoors environment, resolve difficult technical problems and are often looked down on by society. What motivates these men? Why do they do it? Do they enjoy it? How should they be treated? These are some of the questions this study will attempt to answer.

1.2 Objectives

1. Determine how the craftsmen view their trade and what they find satisfying and dissatisfying about it.
2. Determine how the craftsmen feel a crew should be run and if problems are created by working military and civil service civilians side by side.
3. Determine how the craftsmen feel about TQM, social functions, and pay and bonuses in the Air Force.

4. Develop recommendations for foremen, superintendents, and management to increase craftsmen motivation.

1.3 Scope

The scope of this research will include a detailed literature review of motivation theories developed over the last 40 years, coupled with personal interviews with U.S. Air Force skilled craftsmen (military and civil service civilians), analysis of the interview results, and finally recommendations based on these results. The craftsmen interviewed for this research are from three different Air Force bases and include the crafts of electricians, carpenters, plumbers, and equipment operators.

The scope of this thesis is intended to benefit all personnel involved in U.S. Air Force Civil Engineering. However, the construction type craftsmen involved in the maintenance of an Air Force Base are very similar to those in many other areas of the construction industry and the findings in this research can be applied to other areas outside the Department of Defense.

1.4 Thesis Organization

Chapter two of this thesis provides background on motivation and some of the theories on motivation. Chapter three describes the methodology used for this research and Chapters four and five are a presentation of the

interview results. Chapter Six is an analysis of the data by crafts. Chapters Seven and Eight present the conclusions and recommendations.

CHAPTER TWO - BACKGROUND ON MOTIVATION

2.1 Motivation Theories

Motivating workers to perform a specific task has perplexed and confused managers at each hierarchical level and in most jobs over the last century. However, motivation remains a key ingredient in increasing productivity in any industry. Research in this area has been widespread and has lead to many credible theories over the past 40 years.

Motivation is a process not a thing. Motivation can be defined as activities undertaken to satisfy a need or the inducement or incentive to action (Henderson 397). Understanding why people behave the way they do is a perplexing problem. However, the key issues facing most managers in the workplace is how to get people to behave so that the outcome benefits both the organization and the individual. The difficulty with this seemingly simple process is the involvement of human beings. Human Beings are complex and difficult to predict and model. Therefore, the science of organizational behavior is not an exact science and many of the theories developed have vast differences and continue to evolve.

2.1.1 Maslow's "Hierarchy of Needs"

Abraham H. Maslow developed his motivation theory in the 1950's. He proposed that humans are a wanting animal and these wants develop into needs

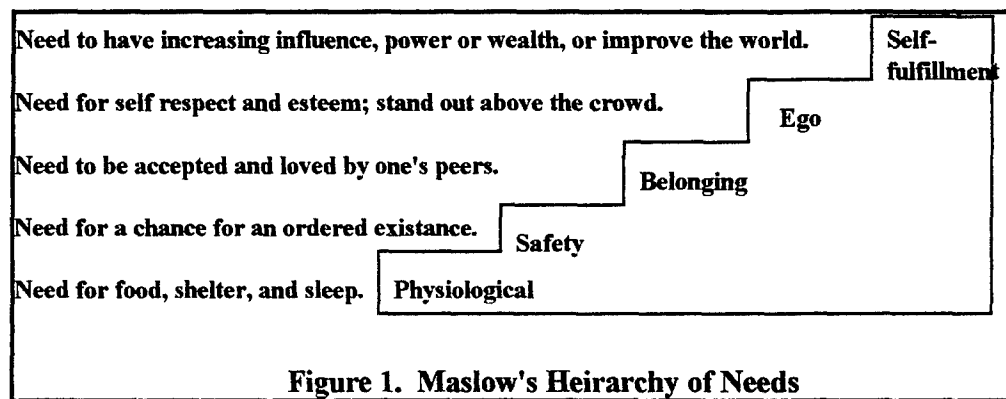
that people try to satisfy. These needs are both physical and psychological plus he placed them into a rank order. This rank order is known as Maslow's "Hierarchy of Needs," as seen in Figure 1. Maslow claimed people first satisfy their lower level or basic needs, then once these are satisfied new higher level needs replace them. Once a need is satisfied it is no longer a motivator, but satisfied needs are always replaced with new needs which then become the new motivator.

The low level needs are physiological needs, such as food, shelter, clothing, and sleep. The low level needs are those necessary to provide comfort for a person and their family. After the physiological needs are satisfied a person will next seek safety. This may be in the form of a secure future or an ordered and structured lifestyle. Both the physiological and safety needs are imposed by the persons external surroundings.

The next three levels on the hierarchy are generated psychologically in the mind of the individual as they think about themselves, their future, and their surroundings. The first of these higher level needs is belonging. This encompasses the need to be accepted and loved by one's peers. After belonging is ego, which is the need for self respect and esteem. A person at the ego level on the hierarchy is attempting to stand out above the crowd. The highest level on Maslow's hierarchy is self actualization. Maslow says what a person can be they must be: a painter must paint, an artist must create, a poet must write, etc. This need involves each person yearning to reach their full potential. Self actualization is very different for each person. If a person is

able to fully satisfy this need, Maslow thinks we can expect full creativeness and productivity from this highly motivated and fully satisfied person.

As stated earlier, once a need is satisfied, it is no longer a motivator, however people can jump around in the hierarchy due to a job change, financial trouble, children, etc. It is worth noting that a need may not be 100% satisfied before it no longer is a motivator. Maslow states, "...most members of our society who are normal are partially satisfied and partially unsatisfied in all their basic needs at the same time (Maslow 1943)."



2.1.2 Herzberg's Two Factor Theory

In the late 1950's and early 1960's Frederick Herzberg developed an extension to Maslow's work. Herzberg proposed that there were two sets of factors in the work environment: job enrichers (motivators), and hygiene factors (see table 1). The job enrichers include such things as achievement, recognition, work itself, responsibility, advancement, and growth. The hygiene

factors are company policy and administration, supervision, work conditions, salary, relationship with peers, etc.

Table 1. - Herzberg's Satisfiers and Dissatisfiers

Satisfiers	Dissatisfiers
achievement	company policy and administration
recognition	technical supervision
the work itself	salary and fringe benefits
responsibility	interpersonal relations
advancement	working conditions
growth or learning	position

Herzberg placed Maslow's first two levels of physiological and safety into his category of hygiene factors. Many times these hygiene factors are potential dissatisfiers for the worker. He claimed these factors were extrinsic to the worker. He goes on to imply management places too much emphasis on these hygiene factors which results in trying to remove as many dissatisfiers as possible. Herzberg feels that no matter how much time management spends on these factors, workers will never be totally satisfied and thus not reach their maximum potential in the work place. Such things as salary, supervision, security, and work conditions may make the worker reluctant to leave a company, but will not motivate them to work harder and become more productive.

Herzberg's job enrichers encompassed Maslow's higher level needs. His theory states that if a job is structured to provide these enrichers, then workers will become challenged and motivated to reach higher levels of productivity. Herzberg points out that these factors are intrinsic to the worker and all too often overlooked by management. Self-esteem coming from a well managed and designed job can motivate a worker through achievement, recognition, meaningful work, responsibility, advancement, and growth (Herzberg 1959).

2.1.3 McClelland's "Need for Achievement"

An alternative view on motivation was developed in the 1960's by David C. McClelland. McClelland's beliefs were similar to Maslow's. He developed the 4 models for success; the need for autonomy, need for affiliation, need for achievement and the need for power. His need for autonomy fell into Maslow's lower level needs of physiological and safety. McClelland's need for affiliation relates to Maslow's belonging and need for achievement and need for power compare with Maslow's highest two levels of the hierarchy (McClelland 1965).

In describing his need for achievement McClelland set forth the Characteristics of high achievers. These characteristics are typical of people who have already satisfied their lower level needs and are reaching for the intrinsic motivators. The following are McClelland's characteristics of high achievers:

- 1) Establish realistic goals

- 2) Work on problems, do not leave to chance
- 3) Willing to take moderate risks
- 4) More concerned with personal achievement than rewards of success
- 5) Prefer receiving feedback on performance
- 6) Think about doing things better
- 7) Often from middle class families and first born child

McClelland feels this list can be used to identify those individual who are motivated by the higher level needs (Borcherding 1993).

2.1.4 McGregor's "Theory X and Theory Y"

Up to this point the discussion of motivation has been focused solely on the worker, however motivation is a process involving both the worker and the manager. Douglas McGregor took a look at managers in the late 1960's and classified them into two categories: theory X and theory Y. He stated that theory X managers believe people are generally lazy, don't want to work and must be driven. Theory Y managers, on the other hand, believe people are basically sincere, honest, and anxious to work. Both theory X and theory Y managers can get workers to perform if their lower level needs have not been satisfied; however if workers have reached a higher level of the needs hierarchy, they will not respond well to a theory X manager (McGregor 1960).

The following describes in more detail what theory X and theory Y managers believe:

theory X

- 1) The average human being has an inherent dislike of work and will avoid it if possible.
- 2) Because of this dislike for work, most people must be coerced, controlled, directed, or threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.
- 3) The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, and wants security above all.

theory Y

- 1) The expenditure of physical and mental effort in work is as natural as play or rest.
- 2) External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Human beings will exercise self-direction and self-control in the service of objectives to which they are committed, including those of organization achievement. The most significant of such rewards, e.g., the satisfaction of ego and self-actualization needs can be direct products of effort directed toward organizational objectives.
- 3) The average human being learns under proper conditions not only to accept but to seek responsibility.
- 4) The capacity to exercise a relatively high degree of imagination, ingenuity and creativity in the solution of problems is widely, not narrowly, distributed in the population.

5) Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized, so that a valuable resource is often lost (Howell 1989).

2.1.5 Japanese "Theory Z"

In the early 1980's William Ouchi published his book which focused on how American businesses could respond to the rising Japanese challenges. His book was not an extension of McGregor's work but did focus on American businesses utilizing a theory Y approach to management. Ouchi also looked at companies in Japan who were utilizing quality circles (Ouchi). He basically created another class of management called theory Z, modeled after some Japanese companies, such as Toyota.

Theory Z also points to workers being more motivated by the higher level needs. Theory Z requires more teamwork, more worker involvement, a long term commitment, and more training. The following attributes are found in theory Z (Borcherding 1993):

- 1) An involved work force is more productive
- 2) Individual cooperation to achieve group and organizational goals
- 3) Close familiarity between people in the work place
- 4) Lifetime employment
- 5) Frequent lateral work assignments prior to promotion
- 6) Working well together as a team
- 7) Participate solution making

- 8) Opportunity for different work assignments
- 9) Implementation of suggestions for improvement

Many of these same attributes are found in the popular management style of the 1990's, known as TQM.

2.1.6 Vroom's Expectancy Theory

Victor H. Vroom developed his expectancy theory in the 1960's, the same time as many of the other theories. However, his theory has gained more acceptance among researchers. All of the previously mentioned motivational theories have been primarily need theories where the researcher tries to get in the brain of the worker or manager and figure out what they are thinking. Maslow says that meeting people's needs will motivate them and Herzberg says that people can be motivated through job content, but many researchers find this an oversimplification. The expectancy theory on the other hand is a process theory, meaning it provides information on how to develop each part of the process of motivation with identifiable and potentially observable parts (Henderson 1994).

Expectancy represents ideas or thoughts an individual develops about the consequences that may result from a certain action. This theory says that individuals have certain preconceived notions about what outcome will result from certain behaviors and actions they may take. These outcomes will meet certain individual and organizational goals. Organizational goals are measured in terms of quantity, quality, or timeliness of output and individual goals could include money, recognition, promotion, and security (Henderson 1994).

Vroom's theory is popular among managers and human resources personnel because it states that motivation is goal directed. All people are motivated by internal needs (motives) and external stimuli (incentives). These motives and incentives direct their behavior toward certain actions leading to goal satisfaction and performance. This is the first theory presented which states that money or monetary rewards can be used as a motivator to control behavior over a long period of time.

2.2 Applying Motivational Theory

2.2.1 Motivation and Pay (Merit Pay)

Merit pay is basically an adjustment to base pay relating directly to the employee's performance. Most organizations wish to highlight the fact that raises are not a guaranteed right. Merit pay is designed to do away with across the board pay raises and emphasize pay as a motivator for high performance.

Edward E. Lawler is one of the nation's experts in employee motivation and reward system designs. Lawler does believe that in theory pay can be a motivator if it provides the worker with a true "piece of the action," or a share of the profits earned or money saved by an organization. He states the problem is too many managers and companies have created the perception that pay raises, incentives, and bonuses are an entitlement or earned right just for staying with the company. In reality if a high performer sees a low performer get the same bonus or pay he gets, then the pay as a motivator suddenly disappears for the high performer (Henderson 1994).

At a 1987 conference sponsored by the American Productivity Center and the American Compensation Association, Lawler stated : "If we've learned one thing after 30 or 40 years of research on pay and motivation, it's that merit pay is a terrible way to increase productivity. . . The difference in merit pay between the outstanding and poor performers is so small that there's no incentive value at all. Not to mention the fact that it's so unclear how a person got a higher or lower raise that it takes an enormous leap of faith, or stupidity, for an employee to decide that pay and performance are really related." He further stated that more companies are scrapping subjective job appraisals and setting up bonus plans based on specific performance goals. However, when companies link bonus pay to individual performance instead of group or company wide goals, instead of better performance, employers sometimes get an every-man-for-himself attitude that does little to boost productivity (Alvareztorres 1987).

One is not to infer that merit pay can't work. The main point here is that pay for performance is very difficult to implement. Performance in itself is very dynamic and very hard to accurately and fairly measure in many jobs. Once the performance is measured figuring out the pay to apply is a problem. As if this is not difficult enough, then management has to deal with the demotivator merit pay causes to those who do not receive it. Therefore, merit pay should be approached with caution and if applied given much attention to make it successful.

2.2.2 Motivation and Productivity "A Plan of Action"

Several motivation theories have been presented thus far as well as some thoughts on using pay as a motivator. Now it is time to implement a strategy to successfully motivate workers to help improve productivity. The objective of motivating workers should be to encourage them to work more effectively and safely and to produce a product of suitable quality. This should not simply mean getting workers to exert more physical effort and managers and staff to put in more hours. It should mean applying all of a person's mental and physical abilities and talents to think, plan, and execute given tasks. It involves developing interest and involvement, which will reduce absenteeism and turnover. In order to achieve higher levels of motivation there must be a positive mental attitude and a strong commitment from people at all levels in the hierarchy (Howell 1989).

The following list is a guideline for utilizing motivation theories to improve productivity (Howell 1989):

- 1) Capitalize on non monetary rewards such as praise and recognition
- 2) Use punishment sparingly and try to administer it in private at all times
- 3) Overcome resistance to change as a demotivator through pre-planning, good communication, and team participation
- 4) Overcome alienation, apathy, and frustration on the job (make the job a place where workers can be satisfied, not a place workers dread to be)
- 5) Recognize the importance of teams and the informal leaders of teams (team building)

- 6) Have a belief in and concern for people (call it a theory Y attitude)
- 7) Regardless of what parties are involved (subordinate, equal, boss, or other), select an appropriate leadership strategy that takes into account the relative abilities and knowledge of those involved, adjusted to fit the existing or projected authority and power relationships
- 8) Establish a communication scheme, taking into account the factors that lead to effective communication, including listening

Turning principles into actions will definitely be easier to read about than to actually perform. This again goes back to the vast differences between human beings and the inability to always predict behavior.

2.3 Conclusions on Motivation

- 1) There are numerous motivation theories that vary in content for many situations. However, by studying and examining some of the theories, effective managers can draw something from each one.
- 2) The field of organizational behavior is not an exact science and managers at all levels should consider elements of each motivation theory and apply it at the appropriate time.
- 3) Money and incentives can be used as motivators but must be approached properly or it can rapidly become a demotivator.
- 4) With increased competition and tightening fiscal budgets in most organization in the 1990's, the pressure to increase productivity and cut cost will continue to grow.

5) Managers need to know that motivation is a key ingredient in increased productivity and simply paying workers more will not get the job done.

CHAPTER THREE - METHODOLOGY

3.1 Study Methodology

The method used for this research was the same method employed by Dr. John D. Borcharding in his 1972, Ph. D. dissertation titled Effective Utilization of Manpower in Construction. As a part of his research Dr. Borcharding performed sixty-five in depth interviews with construction owners, managers, field supervisors and craftsmen. The research for this project focused on the interviews with the craftsmen and some of the same questions employed by Dr. Borcharding were utilized. The 1972 study by Dr. Borcharding proved to be pioneering and pointed out many of the human problems in construction and how they are different from industry in general. The Borcharding study, coupled with the authors experience in the Air Force, lead to the idea of attempting the same type study with Air Force construction craftsmen. As a part of this research, over twenty in depth interviews were performed, encompassing both military and civilian craftsmen, and the results analyzed and presented.

3.2 Literature Search

The author performed a comprehensive search for relevant material relating to motivation and motivation theory to gain a better understanding of what research has already been accomplished in this area. Many articles and books were consulted, some of these articles dated back to the 1940's. All of the insight gained through these references was used to analyze the interview results and write the recommendations and conclusions.

The teachings, publications, and advice offered by Dr. John D. Borcharding were also of great assistance in preparing for and completing this research. Dr. Borcharding's Ph. D. dissertation, as referenced earlier was used as a model for this research and was consulted many times throughout the project.

3.3 Development of Interview Questions

The next step after the literature search was to develop a set of questions to be used in the interviews. The author wanted the interviews to be somewhat relaxed and unstructured, allowing the participants to talk about what was on their mind. However, some structure was needed to keep the information and ideas flowing. After consulting the interview questions utilized by Dr. Borcharding for the apprentices and journeymen, a list of thirty questions was developed to meet the objectives of the research. With Dr. Borcharding's permission some of the same questions were utilized as well as the others that were altered to fit the U.S. Air Force scenario better. New

questions were also added based on the authors experience and to answer specific questions about Total Quality Management (TQM), and defense spending cuts.

It was very important to keep the questionnaire under thirty questions, as to not make it too long. The interviews were performed on the job site during working hours and the author had to be careful not to keep the craftsmen any longer than necessary. The questions were designed to take between forty-five minutes and one hour; however, it was sometimes hard to judge time requirements due to the different responses or non-responses of the participants.

It was necessary to design two different sets of interview questions: one for the military craftsmen, and one for the civil service civilians (as seen at appendices 1 and 2). Most of the questions on both interviews were the same, however the questions dealing with pay and bonuses were slightly different.

3.4 Solicitation and Interviews

Due to time and financial constraints all interviews were performed in San Antonio, Texas. San Antonio offered an ideal location for this study due to its high concentration of Air Force bases coupled with its close proximity to the University of Texas. Three different bases were used to perform twenty-six interviews.

At each base the author had to go through several layers of management to obtain permission to perform the interviews. This usually

started with the Base Civil Engineer or his deputy and worked its way down to the Chief of Operations, to a Superintendent, and ultimately to the foreman or shop chief. The author obtained permission to perform the interviews during working hours, as many levels of management seemed very interested in the study and its outcome.

The author insisted on performing the interviews in a private room with the door closed out of sight and sound from any levels of management. Each participant was advised the interview was voluntary and their individual identities would be kept confidential. This was mandatory to allow the participants privacy to answer the questions freely and without fear of reprisals. The interviews were designed to be done one at a time with the author asking the questions and taking notes as the participant simply talked. However, in a few instances the author had to perform the interviews in pairs with the respondents answering one at a time. Answering in pairs seemed to actually help some participants loosen up and really tell what was on their mind, plus each participant seemed to have their own opinions. In the worst case the author was force on one occasion to interview four participants at once. In this case the author simply had the participants answer the questions on notebook paper in writing. Two of the four answered with long thought out answers and the other two evidently didn't like to write and answered in short one line answers.

The solicitation and interview process was very enjoyable for the author as all personnel contacted were very eager to help. The interviews were spread over a period of three weeks in July - August 1994.

3.5 Data Consolidation and Review

After the data was collected from the interviews it was summarized and organized. First the data was separated into military and civil service civilians, this allowed the indication of similarities and differences of the two groups. Next the data was sorted by craft and again analyzed for trends and common responses.

3.6 Data Analysis

After the data was sorted into different groups it was then thoroughly analyzed to determine common answers for each group and common answers for the entire survey. The raw data as collected by the author is seen in appendices two and three. The analysis started out with a consolidation and tabulation of the answers of the military and civilian craftsmen. This data can be seen in pie chart and table format in Chapters Four and Five of this report. The data was then analyzed by craft, without regard to military or civilian status, to determine trends of the different crafts; this is seen in Chapter Six of this report.

CHAPTER FOUR -

RESULTS OF CIVIL SERVICE CIVILIAN INTERVIEWS

4.1 Participants

A total of 13 civilians were interviewed (three carpenters, three electricians, four plumbers, and three equipment operators). The average experience level was about 19 years, the least experienced craftsmen had worked for five years and three interviewees had approximately 30 years experience. Craftsmen ranged in race from white to Hispanic to black but no statistics or data were collected in this area.

4.2 Satisfiers and Dissatisfiers

Questions four, five, six, and seven of the interview, as seen at appendix 1, were designed to find out what the craftsmen felt were satisfiers and dissatisfiers. The results, as seen in Table 2, support Herzberg's Two Factor Theory mentioned earlier. Most of the satisfiers mentioned were related to achievement, recognition, or the work itself, and most of the dissatisfiers were supervision, administration, interpersonal relations, or working conditions.

Table 2. Civilian Craftsmen Satisfiers and Dissatisfiers

Rank # (*)	Satisfiers	Rank # (*)	Dissatisfiers
1 (5)	Challenging Work	1 (3)	Lazy people
1 (5)	Recognition by customers/customer service	2 (2)	Micro-management (boss makes all decisions)
1 (5)	Building a tangible structure	2 (2)	Environmental and safety laws
2 (2)	Working outdoors	2 (2)	Too many bosses
3 (1)	Recognition by peers	2 (2)	Promotion system
3 (1)	Pay and job security	2 (2)	Being pulled off a job early
		2 (2)	Inexperienced coworker
		2 (2)	RIF (Reduction in Force procedures)
		3 (1)	Poor planning
		3 (1)	Poor organization
		3 (1)	Repetitive monotonous work
		3 (1)	Wasting money on VIP/General visits
		3 (1)	Telling me how to do my job
		3 (1)	Low pay
		3 (1)	Merging career fields
		3 (1)	Weather (extremes)

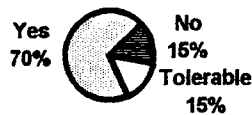
* The number in parenthesis represents craftsmen reporting this satisfier or dissatisfier.

Three things were mentioned the most by the civilian craftsmen as satisfiers: 1) challenging work, 2) recognition by customers/customer service, and 3) building a tangible structure. Craftsmen seem to really enjoy contact with the customer during and after the completion of the job. Several craftsmen interviewed stated when the customer gave them positive feedback it made their week and they remembered it for a long time afterwards. This positive feedback by the actual customer meant much more to the civilian craftsmen than recognition by the supervisor or a coworker-worker. Work that challenged the craftsmen, either mentally or physically, was also mentioned by five different people as a big satisfier. The challenge of completing a tough job is why many of the craftsmen entered this career field and it is the type of work many of them would like to keep doing. Thus, management should avoid putting the same worker on the same type job over and over again. The joy of looking back on a completed job and seeing something tangible the craftsmen helped build or repair was also mentioned five times. Unlike many other career fields which try in vain to achieve this satisfier, it is inherent in the construction fields and management really doesn't have to try to create this satisfier. The only other satisfier mentioned more than once was working outdoors. Working outdoors is again a trait inherent in the job; however, this is a double edged sword as extreme weather conditions in different regions can quickly turn this satisfier into a dissatisfier.

Working with lazy people and the failure of management to weed out lazy people was mentioned by three craftsmen as the number one dissatisfier.

One worker told me the managers were completely helpless as all he had to do was threaten to call the union and the supervisor would immediately back-off. Manager's and supervisors need to learn the Civilian Personnel Rules better, as the author feels unfamiliarity with the actual rules could lead to fear of the union. There were many dissatisfiers mentioned by the civilian craftsmen, but

Figure 2. Is your work enjoyable?



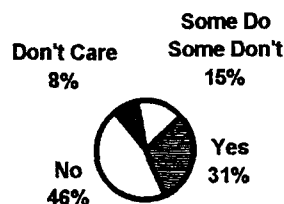
only a few mentioned more than once. Micro management, too many bosses, and bosses pulling workers off a job before completion were three dissatisfiers mentioned more than once. Workers

appeared very frustrated by the sheer numbers and layers of people in the management structure of Air Force Civil Engineering Squadrons.

Environmental and safety laws were also mentioned as dissatisfiers. One worker said, as an electrician, I can't even drill a hole in the wall without them taking two weeks to test for asbestos first. Another plumber said he had been working on dorms for over 20 years and now they tell him he can't go under them until a person comes out first to test for gases. These type situations are understandably important but very frustrating for the worker. Other dissatisfiers mentioned more than once were, inexperience coworker-workers (referring to young airmen), the promotion system, and the reduction-in-force due to base closures and defense spending cuts.

Even though many dissatisfiers were mentioned, most workers did find their jobs enjoyable, as seen in Figure 2. In fact, most people interviewed said

Figure 3. Does society respect your talents and skills?

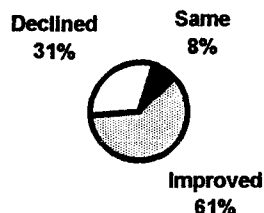


there is nothing there
boss or anyone else
could do to make them
quit. Many of these
civilians admitted to the
author they loved
working for the civil

service as they didn't work as many hours and didn't work as hard as their counterparts in the construction industry or doing maintenance for large companies. One worker told the author, "Where else can I work as little as I want, get the benefits I have, and still get paid as much as I do. As far as the craft itself, most civilian workers chose their craft and love doing it, despite the frustrations they see created by management.

Although more than 45% of the craftsmen were frustrated with

Figure 4. Has the quality of work improved or declined during your career?

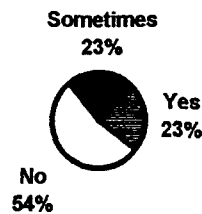


"societies" opinion or
respect for their craft
(see Figure 3), many of
them understood this
misunderstanding of
what they do. Many of

the craftsmen felt the people who relied on their work understood it and many of them felt the majority of society does have a respect for the hard job they perform. The author originally thought the craftsmen would feel more under appreciated than they actually did, however after talking to them they really don't see this as being a problem.

Sixty-one percent of the craftsmen felt the quality of work had improved over their career, see Figure 4. Most of these cited better tools and

Figure 5. Do you take the job home with you?



equipment as the main reason. One plumber mentioned they do more pre-fab now which leads to higher quality work. The 31% who felt the quality had declined

cited either lack of proper training or an emphasis on speed over quality. These workers felt the government and other owner companies were more concerned with saving dollars than spending the extra money on materials and quality work. One worker felt like many jobs are needlessly rushed which leads to poor quality. Overall the author received the impression that the quality of work was not a big problem.

More than half the craftsmen said they never take the job home, see Figure 5. The civilian craftsmen gave the impression they weren't under

intense stress in their job which would require them to bring the job home at night. Even the craftsmen who stated they did bring the job home said they weren't stressed out or anything. Overall the job of civil service craftsmen appears to be a low stress job, according to the workers interviewed.

4.3 Working in crews

Since the craftsmen were given an opportunity to criticize management, they were also asked how they would like to see a crew managed. Three traits were mentioned the most: 1) listen to the craftsmen, 2) know the craft and the job, and 3) treat all crew members the same (see Table 3). The other trait worth mentioning is the boss being more involved. Some of the craftsmen stated their bosses didn't want to know what was going on in the field so they couldn't be blamed if something went wrong. This is obviously not an ideal situation.

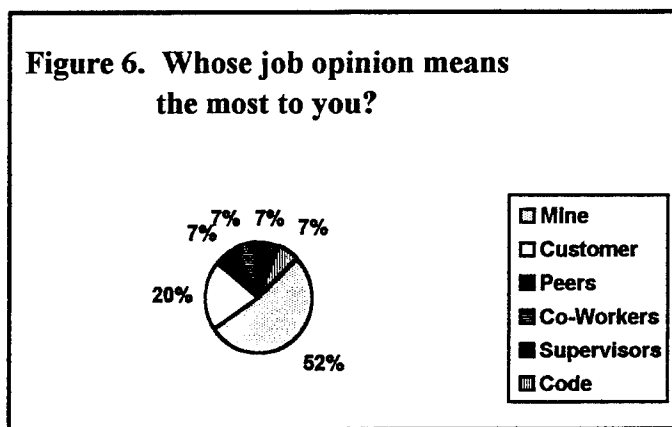
Table 3. How civilian craftsmen feel a crew should be run.

Rank # (*)	Traits
1 (4)	Listen to the craftsmen
1 (4)	Know the craft and the job
1 (4)	Treat everyone the same (no favoritism)
2 (3)	Get more involved
3 (2)	Let the craftsmen make mistakes and learn

3 (2)	Have all the tools and materials ready
4 (1)	Know his people
4 (1)	Stick up for his people
4 (1)	Allow craftsmen to come to you with their problems
4 (1)	Stay out of the craftsmen's way
4 (1)	Have respect for the craftsmen
4 (1)	Check the work periodically
4 (1)	Good communication with the crew

* Number of craftsmen mentioning this trait.

Most workers seemed to think their job opinion or that of the customer



was the most important, see Figure 6. Workers stated they knew how to do the job and they knew when they did it good or bad. Surprisingly, hardly anyone felt the

opinion of the supervisor or boss was very important.

Table 4. Civilian craftsmen indicate what makes a crew perform well together.

Rank # (*)	Trait
1 (6)	Everyone carries their own weight on the crew
2 (3)	Unity/teamwork/all members working together
3 (2)	All crew member like each other (personalities)
3 (2)	A good boss/foremen/supervisor/leader
4 (1)	All crew members understand the job
4 (1)	The crew has fun together doing the job
4 (1)	Trust amongst the crew members
4 (1)	Crew members respect each other
4 (1)	Competition between similar crews
4 (1)	Good communication among crew members
4 (1)	Empowerment of the craftsmen on the crew
4 (1)	Having enough work for the crew to stay busy

* Number of craftsmen mentioning this trait.

The craftsmen felt the number one reason a crew performed well was every person on the crew carried his own weight, see Table 4. As expected the opposite effect was stated if all members didn't carry their own weight the crew performed poorly, see Table 5. In fact, if the response of people not carrying their own weight is combined with one bad apple on the crew, it would be the

number one reason for poor crew performance. Personalities of the crew members was also cited as important for good crew performance. Workers stated if they didn't like the people they were working with the quality of the work suffered. People carrying their own weight and everyone getting along leads to good teamwork which was also frequently mentioned as an indicator of good crew performance.

Table 5. Civilian craftsmen on what makes a crew perform poorly.

Rank # (*)	Trait
1 (4)	Personality conflicts on the crew
2 (3)	One bad apple (his attitude, skills, or training are poor)
2 (3)	All crew members not carrying their own weight
3 (2)	Crew members criticizing each other
3 (2)	Bad morale and unmotivated workers
3 (2)	Craftsman not knowing the job (poor communication)
3 (2)	Rushing the crew to finish too soon
4 (1)	Forcing different crafts to work together (same crew)
4 (1)	Favoritism
4 (1)	Poor craftsmanship

* Number of craftsmen mentioning this trait.

4.4 Total Quality Management (TQM)

Several questions in the interviews determined how participative management and TQM, in particular, are being received by the craftsmen.

Figure 7. Does your boss restrict you in your work capacity?

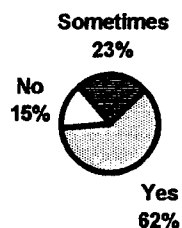


Some supervisors have used a participative style of leadership for many years, however in recent years the Air Force has made a decision to formalize

this style of management and has embraced TQM. Air Force management has made it a goal to train all Air Force employees and to change the Air Force management style at all levels. The author was anxious to see how this philosophy is being received at the worker level in the civil engineering community.

The first question dealing with this subject asked the craftsmen if they

Figure 8. Has your boss acted upon your suggestions dealing with work?



felt their boss restricts their work capacity. As seen in Figure 7, 69% of the workers felt they were not being restricted by their boss, but some of these

workers felt restrictions came from higher up in the beauracracy. There were 31% of the craftsmen who felt their boss (usually shop foremen or crew

Figure 9. Would you enjoy more participation in decision making?



foremen) did restrict them or hold them back. Most of the 31% felt like their boss either didn't listen or underestimated their abilities to handle harder jobs. Some of

these workers also stated concern over more big jobs being contracted out when they felt the capacity existed to handle the job with federal employees. This appeared to be a demotivator for these employees.

When workers were asked if their boss ever acts on their suggestions,

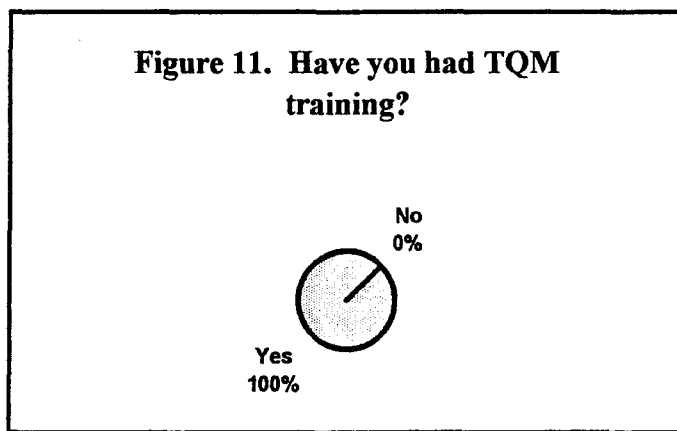
Figure 10. Is your boss military or civilian?



85% either answered yes or sometimes (see Figure 8). This figure is very encouraging for the progress of TQM as more managers appear to be willing to listen to suggestions from the

work force.

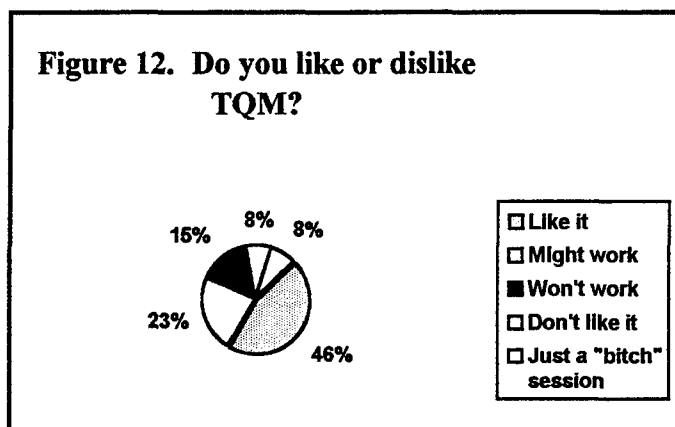
The next question focused on if the workers enjoyed more participation in decisions dealing with jobs they were working. As seen in Figure 9, 23% said they would not like to participate more in this process. Two reasons were mentioned for this answer: 1) bosses had failed to listen to workers in the past



and therefore the worker was turned off and wasn't going to participate again, or 2) workers felt this is why supervisors were paid more and they should be making the decisions.

These 23% of the work force could serve to hamper the progress of TQM in the Air Force.

The question dealing with the boss being military or civilian was not



intended to pick on anyone group but only to see if there was a difference in perception.

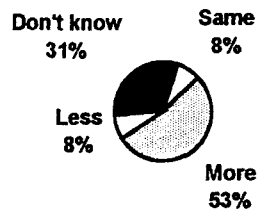
The trend in the Air Force appears to be having civilians work

for civilians and military work for military. Most of the workers interviewed

had worked for or with both and didn't really seem to think it made a difference. They admitted civilians knew more about the civilian rules but said each individual boss was different and military status or not had little to do with it.

In order for TQM to fully take hold in the Air Force several things must happen; two of these things are: 1) everyone must be trained in what it is and how it works, and 2) the worker must embrace it and agree to participate in it. The author was very impressed with the amount of TQM training taking place around the Air Force. Of the 23 workers interviewed everyone of them had been through TQM training (see Figure 11). The author feels this statistic speaks well for the Air Force's continued commitment to the TQM philosophy. The next question asked the worker if they liked TQM or not, 16% said they didn't like it or it was just a "bitch" session (see Figure 12). The remaining 84% either said they liked it or stated they liked the ideas but it wouldn't work. The most common reason stated for its predicted failure was the failure of management and supervisors to change their old ways. Many workers felt like the program was great but it was unrealistic to expect "old style" managers to change after 20-30 years of doing it one way. The Air Force's main challenge appears to be in convincing managers to change their ways and prove the skeptics wrong.

Figure 13. Do you make more or less than your military counterparts?



4.5 Civilian Pay and Appraisals

Military and Civilian craftsmen are paid different wages and receive entirely different benefits. Civilians are paid by the hour and receive overtime and military are paid salary and receive no overtime pay. The author realizes

Figure 14. Do pay differences create a problem between military and civilian craftsmen?

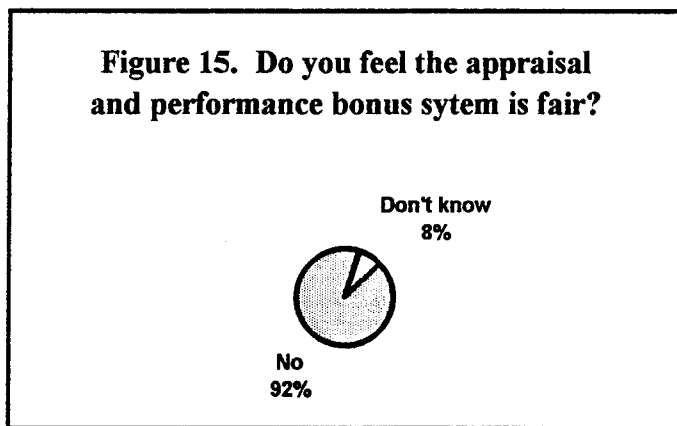


this but wanted to discover if the craftsmen felt there was any inequity or if any problems were created by differing pay scales. As seen in Figure 13., over half the civilians

felt they made more money than the military and a large percentage of the rest did not know. Many civilian craftsmen felt the military didn't receive as much pay because they received more in benefits, while others felt the military

craftsmen should receive less money because they weren't as experienced and didn't work as hard as civilians. These civilians stated the military had too many additional duties which frequently pulled them off the job, another reason mentioned was that the civilians were hired already trained where as the military were inexperienced and had to be fully trained by the Air Force. As seen in Figure 14., almost 70% of the civilians didn't feel pay was an issue of concern and that it didn't create any problems.

As seen in Figure 15., when civilians were asked if the appraisal and performance bonus system was fair, an overwhelming majority said no. This

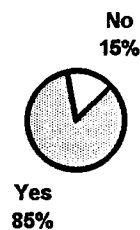


appeared to strike a nerve in many civilians and they became very vocal during the interview on this subject. Most of these workers felt the system was far too subjective and stated

that managers tended to give the bonuses to their "friends" every year. Many workers stated they would rather not have a bonus system if it continues to operate as it is set up now. One worker told the author he would rather see a public recognition program or program to receive a day off as an alternative. He also suggested the program would be more effective if the reward was matched with a specific action rather than at the end of the year. Another

worker said, "If the system is so fair then why is it always a secret and no one ever knows who received what; if it is going to be a motivator they have to tell me who is doing good so I can model my work after theirs." This worker went on to suggest publishing the appraisal results and bonuses on a bulletin board so everyone could read them. Whatever the solution, it is apparent to the

Figure 16. Do you expect to get a raise every year?

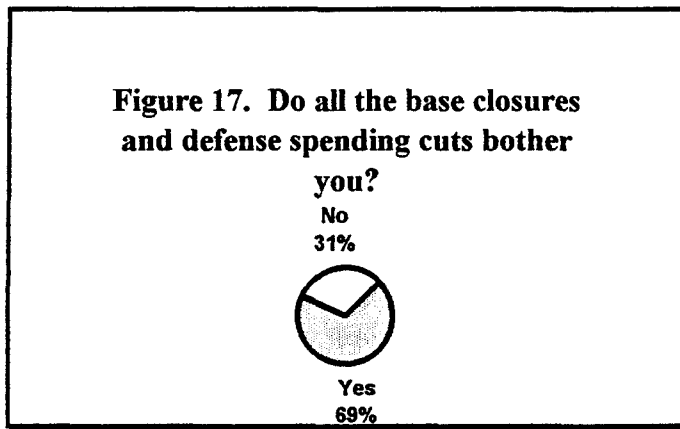


author the present system does not sit well with the civilian craftsmen. These remarks appear to support the research discussed in Chapter Two.

Eighty-five percent of the craftsmen reported they expected to receive at least a cost of living raise each year (see Figure 16). They stated they were accustomed to receiving this each year and looked forward to it. By failing to award this raise in the future after setting a precedence, this would be detrimental to morale and would create another dissatisfier for the craftsmen. As mentioned in Chapter Two, it is dangerous to start giving a raise each year because then the worker will expect it and it is a very hard thing to stop doing.

4.6 Base Closures and Defense Spending Cuts

The author inserted this question after spending three years at a closing base and realizing how much this effects the lives of those people who work there. When an employee works for a company that is publicly announcing a personnel draw down and the future closure of unknown facilities, it tends to create stress and anxiety. The Air Force appears to be no different than other



companies in this regard as almost 70% of the workers said the base closures and defense spending cuts bothered them (see Figure 17.). Although most of the workers

were worried about their job security, some were as concerned about the welfare and security of the country.

4.7 Social Functions in the Workplace

Workers were asked if social functions on the job added to job satisfaction. Of the 69% responding yes most noted they preferred parties at the shop level (see Figure 18.). These workers mentioned that parties at the squadron level were also good, but activities with more than 100 to 150 people

was too big. Of the 31% responding no, most stated they would rather have the time off or they would rather not socialize with coworker-workers. Some

Figure 18. Do you think social functions add to job satisfaction?



workers expressed concern over serving too much alcohol and all seemed in agreement that if alcohol was served the amount should be

controlled. Overall the author received the impression that most civilians liked a shop level party about once a month, as they felt this helped build morale and a team spirit more than larger parties.

CHAPTER FIVE - RESULTS OF MILITARY INTERVIEWS

5.1 Participants

A total of 10 military craftsmen were interviewed (two carpenters, two plumbers, three electricians, and three equipment operators). The level of experience was an average of eight years with the least being two and one-half years and the most being 19 years. The military craftsmen tend to be less experienced than the civilians for two reasons: 1) they can retire after 20 years of service, and 2) they enter the Air Force usually with no experience in the craft. Both male and female craftsmen were interviewed as well as white, black, and Hispanic craftsmen, however no data was collected in this area.

5.2 Satisfiers and Dissatisfiers

The number one satisfier mentioned by military craftsmen was challenging work, as seen in Table 6. Seventy percent of the military members said they enjoyed work that challenged their skills and made them think on the job. This speaks well for the type of craftsmen in the Air Force today, for they tend to be bright, motivated, and eager to learn from challenging jobs. This type of worker presents a challenge for managers who have to balance between using the more experienced civilian craftsmen and keeping the younger military craftsmen from getting bored. Three other satisfiers mentioned by the military

members were: 1) building a tangible structure, 2) working outdoors, and 3) working with your hands.

Table 6. Military Craftsmen Satisfiers and Dissatisfiers

Rank # (*)	Satisfiers	Rank # (*)	Dissatisfiers
1 (7)	Challenging work	1 (4)	Micro management
2 (3)	Building a tangible structure	2 (3)	Wasting money for VIP/General's visits
2 (3)	Working outdoors	2 (3)	Draw down of forces
2 (3)	Working with your hands	3 (2)	Lack of tools and materials
3 (1)	Recognition by customer/ customer satisfaction	3 (2)	Low pay
3 (1)	Recognition by management	3 (2)	Merging career fields
3 (1)	Working a job from beginning to end	3 (2)	Lack of challenging work (boredom)
		3 (2)	No respect for workers
		4 (1)	Unhealthy work environment
		4 (1)	Favoritism
		4 (1)	Lazy workers
		4 (1)	Boss publicly criticizes you

		4 (1)	Pulled off the job early
		4 (1)	No recognition
		4 (1)	Rushing the job (time)
		4 (1)	Taking away benefits
		4 (1)	Working with civilians
		4 (1)	Wasting money
		4 (1)	Coworkers-workers complaining
		4 (1)	Repetitious monotonous work

* Number in parenthesis represents craftsmen mentioning this trait.

The number one dissatisfier mentioned by the military members was micro management, as seen in Table 6. This complaint focused on bosses not allowing the craftsmen to use his own judgment and skills to get the job done. Many military craftsmen complained about having to check everything with the boss (usually the shop foreman or crew leader). Two more areas mentioned by the craftsmen were wasting money on V.I.P./General visits and the current draw down of military forces going on in the Department of Defense. The interesting thing about the many dissatisfiers mentioned by the military members is that only a few were repeated by more than one person and each person seemed to have their own idea. This long list of dissatisfiers made it hard for the author to draw any conclusions or see any trends.

As seen in Figure 19., eight out of ten military members enjoyed their

Figure 19. Is your work enjoyable?

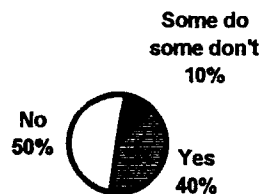


job. The two members interviewed who appeared very unhappy with their job were both young airmen who were working with mainly civilians.

These airmen

complained about lack of training, no challenging work, and excessive complaining everyday by coworkers-workers. Both of these airmen expressed

Figure 20. Does society respect your talents and skills?



concern over their present situation and said they liked the Air Force but didn't like their present job or shop. Over all the author received the impression everyone

really enjoyed the Air Force and those being forced to retire at 20 years really would like to stay longer.

When the military members were asked whether society respected their skills, it was almost an even split, see Figure 20. The author couldn't draw a conclusion either way on this question, for some of the members felt they were treated fairly by society and some members felt society didn't have an idea what they did. The carpenters and electricians seemed to feel more respected by society than did the plumbers and equipment operators. The plumbers and equipment operators felt their job required much more skill than the average person thought. However, all of the craftsmen said society respected their status as military members. It was their status as plumbers, electricians, carpenters, and equipment operators that was called in to question.

Again it was hard to draw conclusions from the answers given to the question of whether or not the quality of work had improved or declined, see

Figure 21. Has the quality of work improved or declined in your career?

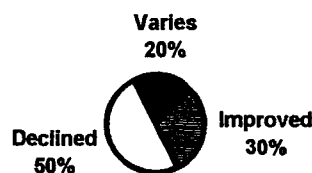
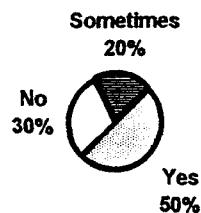


Figure 21. The more experienced military members seem to think it had either improved or that it varied from base to base. Some of the people did express

concern about more big jobs being contracted out, because they felt the contractor might not do as good work and they would be left to maintain his mess.

The military craftsmen seem to carry the job home with them more than the civilians, see Figure 22. Seventy percent said they carried it home with them all the time or part of the time. They are called out more after duty hours and at night to fix things. Interviewees complained the civilians never had to

Figure 22. Do you take the job home with you?



come in at night due to the Air Force being forced to pay the civilians overtime. The less experienced military craftsmen seemed more stressed about their job and would take it home

with them more than the experienced members.

5.3 Working in Crews

As far as working in a crew, military craftsmen wanted to be on their own and liked to have more control of how the job was run. Six out of ten craftsmen mentioned they liked managers or supervisor to ask their input on the job and also let the crew handle the job after it was started, see Table 7. This goes back to the type of people the Air Force seems to be attracting, for they like to think and be challenged with more responsibility. The only other traits mentioned more than once were: 1) let the craftsmen make mistakes and learn from them; and 2) the boss should know the craft and the job. The

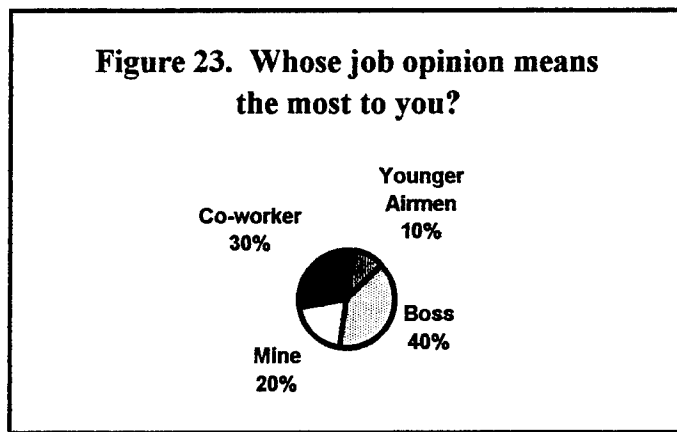
military responses seem to fall in line with what the civilian craftsmen reported, on this subject.

Table 7. How military craftsmen feel a crew should be run.

Rank # (*)	Trait
1 (6)	Listen to the craftsmen
1 (6)	Let the crew handle the job
2 (3)	Have the materials and tools ready/plan the job well
3 (2)	Know the job and the craft
3 (2)	Let the people make mistakes and learn
3 (2)	Good communication with the crew
4 (1)	Treat everyone the same (no favoritism)
4 (1)	Go away and the work still gets done
4 (1)	Have a backup plan
4 (1)	Record all results (track each workers progress)
4 (1)	Keep the same people on the job start to finish
4 (1)	Know the people on the crew and their abilities
4 (1)	Respect the craftsmen
4 (1)	Act as a buffer zone from higher management

* Number in parenthesis represents craftsmen mentioning this trait.

The military members appeared to worry more about their bosses opinion of their work than the civilian workers. Forty percent of them reported their bosses opinion meant the most to them, see Figure 23. The remaining 60% of the answers were spread out between their own opinion, or



their coworker-workers.

Interestingly enough none of the military members mentioned the opinion of the customers as did the civilian craftsmen. It is hard to believe the military

craftsmen are in a service organization and none mentioned the customers opinion as being important.

Teamwork and crew members having respect for one another seemed to be the key ingredients mentioned by the military members for good crew performance, see Table 8. Military members seemed concerned about attitude of the work force, as well, and pointed the finger at the civilians for bringing the crew down at times by complaining. Another trait repeated again was having a boss that listens to the workers. This was probably repeated more times than any other comment through out the interviews.

Table 8. Military craftsmen on what makes a crew perform well together.

Rank - # (*)	Traits
1 (5)	Teamwork
1 (5)	Crew members have respect for one another
2 (4)	Crew members all have a good attitude
3 (3)	Boss that listens to the craftsmen on the crew
4 (2)	Craftsmen have been well trained and have good skill
5 (1)	Flexibility among the crew members
5 (1)	Sense of humor on the crew
5 (1)	Boss shows no favoritism to any crew member
5 (1)	Feeling of accomplishment when the job is done

* Number of craftsmen mentioning this trait.

Military members came up with many different ideas on poor crew performance, but very few of them were repeated by more than one craftsmen, see Table 9. The only reason given three times was personality conflicts which lead to fighting between team member, this was also the number one reason mentioned by civilian craftsmen.

Table 9. Military craftsmen on what makes a crew perform poorly.

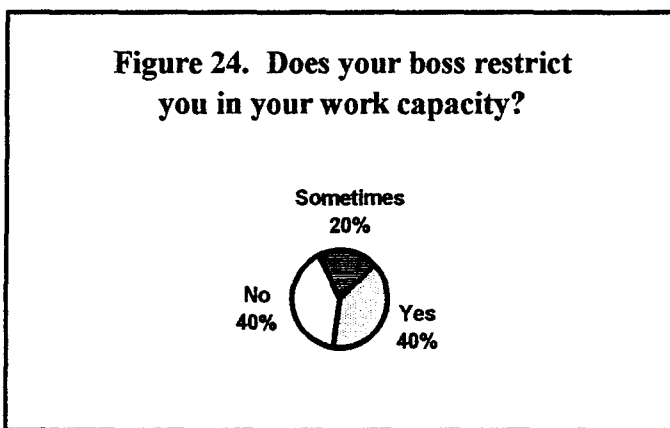
Rank - # (*)	Trait
1 (3)	Fighting amongst the members/personality conflicts
2 (2)	Dictatorships/Bosses who fail to listen to the crew
2 (2)	Incompetent supervisor

2 (2)	Bad attitude among the crew members
3 (1)	Hot weather
3 (1)	Rushing the job (time)
3 (1)	Crew members not carrying their load
3 (1)	Lack of training for crew members
3 (1)	Poor communication among crew members
3 (1)	Lack of proper tools and materials

* Number of craftsmen mentioning this trait.

5.4 Total Quality Management and Other Management Styles

As mentioned in Chapter Four, the author set up the questions on participative management and TQM to see how the craftsmen felt about this subject and how they perceived it working. As seen in Figure 24., 60% of the



military members felt their boss restricted them in their work capacity all of the time or some of the time. One of these members told the author he felt the military always got

the worst jobs, because bosses were scared to send the civilians out on bad

jobs, for fear of a Union complaint. This member complained that if all he ever received were these type jobs how was he ever going to learn from the harder more challenging jobs.

As was reflected in the civilian interviews most bosses seem to be

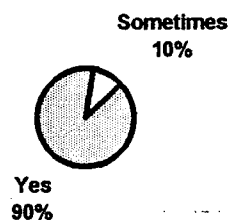
Figure 25. Has your boss acted upon your suggestions dealing with work?



listening to the craftsmen more (see Figure 25), for 80% of the military stated their boss had acted on their suggestions. The only two workers reporting they hadn't had

suggestions acted on were younger airmen working in a shop of almost all civilians. Most workers seem to think in the last few years their bosses had started to be more receptive to suggestions, again this is encouraging for the progress of TQM.

Figure 26. Would you enjoy more participation in decision making?



When the military members were asked if they would enjoy more participation in decision making, 90%

said yes, see Figure 26. The only person who answered no was an experienced craftsmen who said he thought the military structure should be maintained and

Figure 27. Is your boss military or civilian?

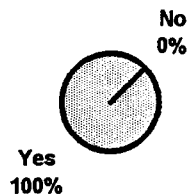


he felt TQM was allowing the young airmen to act disrespectful toward higher ranking individuals. Although his point seems out of

date on the surface, he does have a point in that the military hierarchy and discipline must be maintained (especially in a war time situation).

As seen in Chapter Four, the trend in Air Force Civil Engineering seems to be to put military members under military bosses and civilian craftsmen under civilian bosses, see Figure 27. This may or may not be such a good idea as will be discussed more in Chapters Six and Seven. The younger

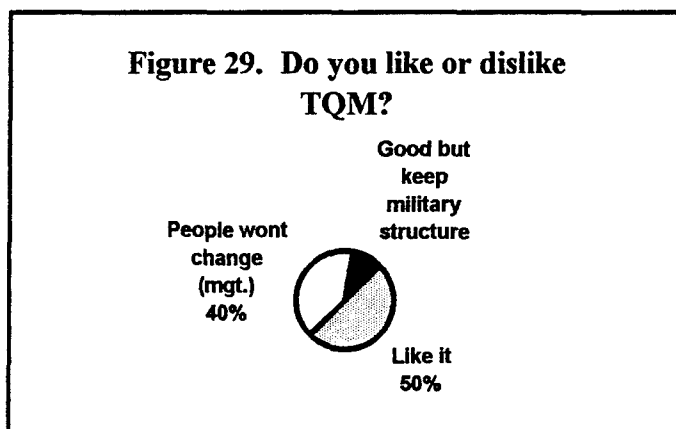
Figure 28. Have you had TQM training?



military members seem to prefer to have a military boss and the older members seem to think it depended more on the individual and status had nothing to do with it.

As seen in Figure 28., 100% of the military craftsmen interviewed had received TQM training. Based on the limited number of people interviewed it appears the Air Force is on target for training all personnel, although some individuals did question the credentials of some of the teachers. One member told me his teacher didn't know the material well and just confused the class more than explaining the principles of TQM.

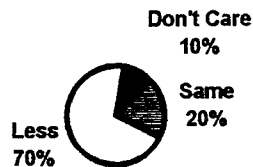
As seen in Figure 29., almost all the military members liked the principles and ideas of TQM, however 40% of them didn't feel things would



change enough for it to be successful. These skeptics seem to have every right to feel this way until the Air Force managers change their ways more and the workers see this style

of management on a day to day basis. Some worker told the author that TQM would have to be forced on some managers, because they already said they wouldn't change the way they did business.

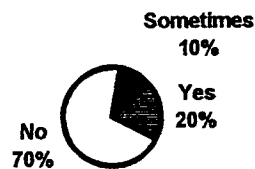
Figure 30. Do you make more or less money than your civilian counterparts (same experience)?



5.5 Military and Civilian Pay

Military members seemed to think they made less money than their civilian counterparts, as seen in Figure 30. However, it is important to note that the majority also seemed to think pay was not a big issue. The military members pointed out to the author, on several occasions, they felt the benefits

Figure 31. Do pay differences between military and civilians create a problem?



for the military made up the difference in pay. Some of the benefits mentioned were health care, commissary, travel, and training. Although

some of the craftsmen pointed out the civilians shouldn't make more money than the military it didn't appear to be a big dissatisfier to the military and wasn't something most people ever thought about, see Figure 31. The only big problem mentioned by the military craftsmen seemed to be overtime and the

fact that military members couldn't receive it. However, another craftsman pointed out to the author that he would rather have the compensatory time-off rather than overtime pay anyway. It is important to note most military members don't join the military for pay and are motivated by other things such as duty, tradition, adventure, travel, etc.

All the previous questions focused on base pay and overtime. An issue

Figure 32. Do civilian bonuses bother you?



which seemed to create a bigger problem was the civilian bonuses awarded at the end of each year, see Figure 32. Military craftsmen didn't feel this system

was fair to them as they felt they had done the same work as the civilian craftsmen. The bonuses did appear to create a dissatisfier for the military

Figure 33. Do you expect to get a raise every year?



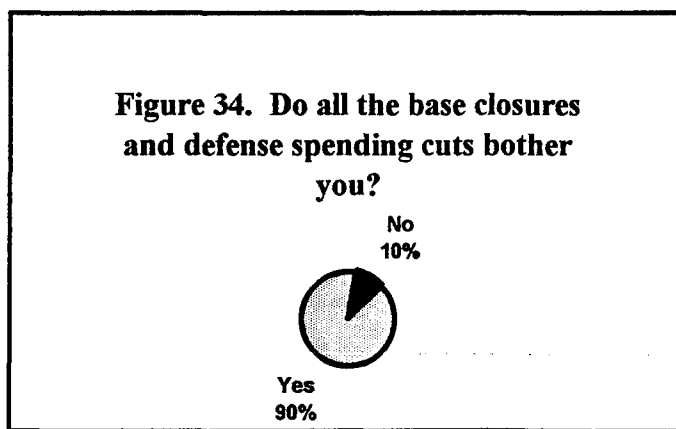
members when someone they worked side by side with on a project received a bonus and they didn't. Also, it was a dissatisfier for some of

the civilians that felt the awards were unfair.

The military expect the same cost of living raise every year as the civilian craftsmen do, see Figure 33. Most military members stated they had received this every year and expected it as a part of working for the government. One craftsmen stated the raise was never as big as what they deserved and it better be bigger than a couple of cents every year. Again, if the government decided to stop these cost of living raises, after setting a precedence, this would create a dissatisfier.

5.6 Base Closures and Defense Spending Cuts

The defense spending cuts and the draw down of military personnel seemed to bother the military craftsmen more than base closure. However, 90% of the craftsmen said they were concerned about all these issues, see Figure 34. One craftsmen told the author, "I am at a point in my life where I have to decide to stay in the military for a career or get out, why should I stay in a job with no future and no job security?" This craftsmen went on to say he

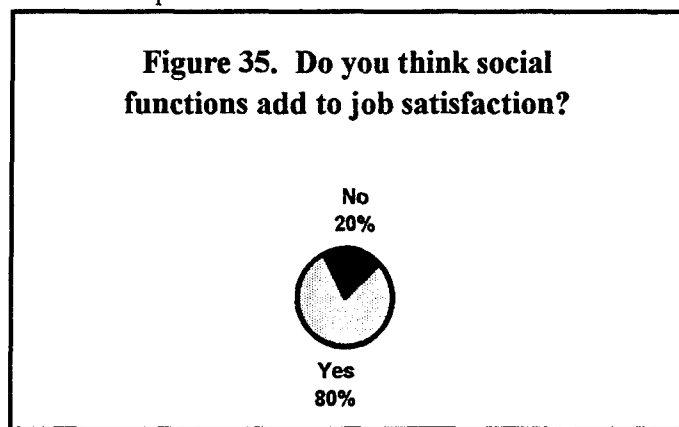


was a fine craftsmen and the Air Force would be losing out if he chose to get out of the service. The comments of this craftsmen seemed to

capture the spirit of most members interviewed. The military craftsmen seem to take this question to heart and many expressed genuine concern about the future strength of the military and the security of the country. The author received the impression that when good people leave or they are asked to resign the military, the remaining people notice this and tend to take it personal, wondering if they're next.

5.7 Social Functions

The military craftsmen seem to value the social functions more than the civilians. This could be because military families move often and aren't as well established in a city or community as their civilian counterparts. Eighty percent of the military felt the social functions added to job satisfaction, see Figure 35. One thing the military craftsmen had in common with the civilian craftsmen is both seem to think parties at the shop or working team level had the most impact.



CHAPTER SIX - RESULTS OF INTERVIEWS BY CRAFT

6.1 Electricians

The electricians interviewed, both military and civilian, seemed to enjoy the challenge of figuring out new problems. These craftsmen enjoy participation with management in making decisions and they like to be asked their opinion on things. However, these workers can become bored very easily if they are managed to closely or put on repetitive type work for extended periods of time. Approximately half of the electricians said they wouldn't go into this craft again and many stated they would stay in school longer. Due to the nature of their work, these craftsmen should be rotated between different types of work. Secondly, they should be presented with challenging jobs and problems on a frequent basis to hold their interest and enthusiasm in the craft.

6.2 Carpenters

The carpenters interviewed seemed to be very creative and really enjoyed looking back on what they had built. Most stated they would rather the boss give them an idea of what the customer wants and then allow them to make suggestions on materials and slight changes to the design to make the end product more functional and appealing. Carpenters were dissatisfied when they were forced to construct a project to a poor design. Another big dissatisfier for this group is being pulled off a job early. Carpenters like to

work a project from beginning to end to gain the gratification of seeing a tangible structure finished. The last dissatisfier the author will mention for carpenters is the continuous use of poor materials. The craftsmen think they will be blamed when the materials don't hold up over time. They prefer to be consulted on which materials to use.

6.3 Plumbers

The plumbers seem to be most concerned about the lack of respect they receive from society. These craftsmen learn a trade, work in sometimes less than desirable conditions, and perform a task most people would not want to think about. In general, society also feels they are overpaid. Plumbers seem to be very frustrated and under recognized, they need to be given more pats on the back and public thanks for a job well done. Simple recognition of the plumbers could bring big dividends in their attitude and productivity.

6.4 Equipment Operators

The equipment operators seem to be the "step children" of Air Force Civil Engineering, at least this is their perception. If the plumbers suffer from lack of respect by society the operators seem to suffer from lack of respect from the other crafts and from management. The workers interviewed complained that everyone else in Civil Engineering thinks there job is easy and anyone can learn to drive this equipment. This perception is very unfair to

these workers. Just as the worker told the author, there are drivers and there are operators, for anyone can drive but it takes skill and practice to precisely operate. Operators also complained of always being given the worst jobs, they said the other crafts felt like they were too good to weed eat, pick up trash, dig with a shovel, or clean up after themselves. Whether these perceptions are reality or not, they do exist and must be dealt with. Operators appeared to have the worst morale of all the crafts interviewed and something needs to be done about it.

CHAPTER SEVEN - SUMMARY DISCUSSION

7.1 Craft Satisfaction

Table 10. is a combination of the top responses given by both military and civilian craftsmen, this shows the number one satisfier for craftsmen is challenging work. Almost without exception the craftsmen interviewed seemed to think they were bored too often and always looked forward to a job which challenged them mentally or physically. The second biggest satisfier for these craftsmen was building a tangible structure, this satisfier can only be accomplished if craftsmen are put on minor construction jobs and allowed to stay on them to completion. In some of the shops visited for this research, the author noted some craftsmen always did the minor maintenance work and some always did the minor construction type work, craftsmen should be rotated between the two types of work. Rotating the workers will not only serve as a motivator but also serve as a good training mechanism to ensure all craftsmen are well rounded. Recognition by the customers seems to be very important to a good portion of the civilian craftsmen but only one of the military craftsmen mentioned this as a satisfier. Civil Engineering in the Air Force is a service type organization and therefore customer service is very important, managers should seek out the opinions of the customers and pass this on to the craftsmen. The last satisfier listed most frequently by craftsmen was working outdoors. Construction type craftsmen tend to enjoy working outdoors and management should strive to get them the proper equipment to

combat extreme weather. If some jobs are indoors and some jobs are outdoors it seems managers should seek to evenly rotate the men who like to work outdoors.

Table 10. Top Satisfiers and Dissatisfiers for all Craftsmen

Rank # (*)	Satisfiers	Rank # (*)	Dissatisfiers
1 (12)	Challenging work	1 (6)	Micro management
2 (8)	Building a tangible Structure	2 (5)	Personnel Cuts/R.I.F.
3 (6)	Recognition by Customers	3 (4)	Lazy People
4 (5)	Working Outdoors	3 (4)	General/V.I.P. visits

* Number of craftsmen mentioning this satisfier or dissatisfier.

The list of dissatisfiers mentioned by the craftsmen seemed to be long and more spread out than the satisfiers. This would indicate they are more shop specific or boss specific. However a few trends did develop in this area, such as the high degree of micro management. Micro management was defined by the author as getting overly involved in the craftsmen's business and not allowing them to make reasonable decisions on the job site without consulting the boss. Most of the foremen and supervisors worked their way up through the ranks as craftsmen and therefore have developed their own methods for doing a job. However, they should not forget how important it is to the craftsmen to figure some things out and be allowed to make mistakes on their own.

Personnel cuts were a serious dissatisfier and this will be discussed further in section 7.5. The next dissatisfier mentioned was lazy people. Management is challenged to fire or change the behavior of these individuals for there is evidence that they are present within the organizations that were studied. The craftsmen report far too many bosses who choose to look the other way as workers seem to be lazy and allow others to do more than their share. Although it is uncertain how widespread this problem is, it certainly causes dissatisfaction of craftsmen who have a good attitude and want to work hard for the Air Force.

The last dissatisfier mentioned in Table 10. is the General/V.I.P. visits. In the eyes of the craftsmen they are wasting valuable time and money to clean up certain sections of the base to ridiculous standards for a person to whiz by at 30 M.P.H. This practice is very widespread in the Air Force and discourages the craftsmen. Also it doesn't speak very well for the principles of TQM. If the current practice of fine grooming a specific route for a V.I.P. is absolutely essential for the well being of the Air Force, then each time it occurs TQM principles should be followed such that a plan and purpose of this practice would be explained to the work force in the beginning. This will reduce some of the grumbling and bad attitudes.

7.2 Working in Crews

Working in teams and crews is inherent in most construction crafts and therefore doing it effectively is very important. The craftsmen have all

experienced what they consider good and bad crews and offer some good ideas on how to improve crew performance.

Table 11. shows the top four ways the craftsmen feel a crew should be managed. The top reason mentioned was to listen to the craftsmen. Bosses who fail to listen to craftsmen not only upset their workers but also have a greater chance of not knowing what is really happening in the field, and thus making more mistakes.

Let the crew handle the job, refers to after the job has been planned and instructions given, the boss should let the crew do the job and resolve minor problems that occur during the job.

Know the craft and the job, refers to bosses being familiar with the craft and all aspects associated with it. The craftsmen feel the boss should be qualified in the craft and should have a good understanding of all jobs currently under way by his/her people.

Table 11. Top ways all craftsmen feel a crew should be managed.

Rank # (*)	Trait
1 (10)	Listen to the craftsmen
2 (8)	Let the crew handle the job
3 (6)	Know the craft and the job
4 (5)	Treat everyone the same

* Number in parenthesis denotes the number of respondents citing this trait

Table 12, illustrates the top traits mentioned by all craftsmen leading to good and bad crew performance. The military members mentioned teamwork

the most and the civilians mentioned carrying your own weight. Lumping these two together as the same ideas gives the number one reason stated for good crew performance. The craftsmen mentioned things like working together, no slackers and a feeling of being a part of a team. The subject of team building and how to accomplish this trait is a subject which requires much attention and is addressed at length in most TQM training. Personality conflicts which lead to fighting amongst team members was listed as the number one trait leading to poor crew performance. Supervisors should go out of their way to ensure personality conflicts do not hamper the performance of a crew.

Table 12. Top traits listed by all craftsmen leading to good and bad crew performance.

Rank # (*)	Good Crew Performance	Rank # (*)	Poor Crew Performance
1 (14)	Teamwork/Carry own wt.	1 (7)	Personality Conflicts
2 (6)	Respect for each other	1 (7)	Bad attitude/1 bad apple
3 (5)	Boss that listens/Good boss	3 (4)	People not carrying their own weight

* Number in parenthesis denotes number of people mentioning this trait.

7.3 TQM

Every person interviewed for this study seemed to know about TQM and had attended some type of TQM training. Overall most people liked the principles and ideas behind TQM; however, a degree of skepticism exists among the craftsmen. The craftsmen are concerned it is just another program and everyone at the top is talking about it, but business as usual continues. The author got the feeling most people didn't believe things will change very much and craftsmen's opinion will never be heard. One electrician said, "I have filled out surveys similar to yours on numerous occasions and never once have I seen anyone get back to me with answers nor have I seen any changes as a result of my input." The second reason stated by the craftsmen for the eventual failure of TQM was the failure to drive out fear. Some younger workers stated they felt if they stated their opinion it could hurt their career. The Air Force has made one of its top priorities to institute the principles of TQM. However, the author feels they have yet to prove this to the people at the ground level.

7.4 Military and Civilians Working Together

The issue of military craftsmen versus civilian craftsmen seems to be a concern at all bases in the Air Force. At the three bases in this research the author witnessed some shops that worked together with no problems. On the

other hand, there were shops that the author had to keep steering the conversation back on track because the interviewee was constantly complaining about the military or civilians and how one group or the other was incompetent and lazy. One thing was evident in the shops where problems existed between these two groups, all members interviewed seemed less focused on their job and somewhat irritated at the situation. An atmosphere with distractions, such as these type rivalries, can only be detrimental to the motivation and productivity of the work force. In the situations where the problems existed the workers always complained about the boss either showing favoritism to one group or the other by always assigning one group the "good" jobs and always assigning the other group the "bad" jobs. In every case the problems created by military versus civilians seem to either be created at the top by supervisors or managers or could be stopped by supervisors or managers.

7.5 Base Closures and Defense Spending Cuts

Base closures and defense spending cuts were on the mind of almost all workers interviewed. The civilian workers are worried about base closures and RIF's and the military are worried about personnel cuts or failure to be promoted. Most workers seemed to be worried and stressed about their job security, as one young airmen said, "Why should I commit to the Air Force to stay in for a career when I could be in a job with no future, I don't want to get 10-15 years in the service and then have them tell me I no longer have a job."

Most of the civilians interviewed already had many years invested in civil service and seemed to get highly upset with any mention of closing down "their" facility. The current draw down system where no one knows which base will close or how many people will be laid off from year to year is creating a tremendous amount of stress.

In addition to the issue of job security, many of the craftsmen also mentioned the overall status of the military and the security of the country as major concerns. Some workers openly told the author they didn't agree with the current President's policies on the military or the future strength and capability of the military. The impression these workers have is the military is becoming weak and cutting back. This causes them to think they no longer work for a strong employer. One worker told the author he comes to work and sees them laying off more people and then he goes home and watches the news and they are purchasing another billion dollar airplane.

7.6 Pay

To the author's surprise the military and civilian craftsmen do not care about the pay discrepancy between the two groups. The author approached this research thinking this could be an issue. However, after talking to the workers there doesn't appear to be any hard feeling on either side as far as base pay is concerned. The military feel they have better benefits and the civilians feel they have better pay. Thus, both sides seem very content. The Air Force craftsmen are happy to have their jobs that almost all of the interviewees said there is

really nothing that would make them quit their jobs. Only through probing the question further was the author able to get the military craftsmen to list reasons to get out of the Air Force. Also, after probing the civilians, they said there is nothing anyone could do to make them quit their jobs.

The civilian appraisal and bonus system is a matter of concern. Ninety-two percent of the civilians said the appraisal system was not fair and the bonuses given out weren't based on equitable reasons. Workers stated bonuses had little or no effect on craftsmen performance. The civilians seem so frustrated with this subject they really didn't want to discuss it with the author. Apparently, it was so screwed up and there was little chance for change. The survey input or other discussions wouldn't matter anyway. Over and over again craftsmen told the author how the system didn't seem to relate performance to reward. It was only a subjective opinion by the supervisor. This is totally opposite what behavioral scientists have found to be an effective motivator (Henderson 1994). Many civilians told the author if the system is honest, then why do they do it in secret and never tell anyone the results. Although the military members didn't understand why the civilians got bonuses for doing the same work they did, and most stated the bonuses did bother them, it wasn't an issue.

7.7 Social Functions in the Work Place

The military members seemed to like the parties and social functions more than the civilians by a slight margin. One issue both parties unanimously

agreed on was that shop level parties gave them the most enjoyment. Most stated the larger parties with people they didn't work with or ever see didn't do anything to boost their morale and clicks were formed most of the time anyway. The issue of alcohol was somewhat a mixed reaction, for some people said it should be served and some said it should not. However, almost everyone said if it was served the amount should be monitored.

CHAPTER EIGHT - RECOMMENDATIONS

8.1 Actions Based on this Research

As discussed in Chapter Two, Frederick Herzberg pointed out most dissatisfiers were related to as administration, supervision, salary, interpersonal relationships, working conditions, and position within the company. Herzberg went on to explain how removing these hygiene factors is important but it usually will not serve to totally satisfy the employee. Managers need to eliminate the dissatisfiers listed in Tables 2, 6, and 9; however, they should not spend the majority of their time focusing on these issues. Managers should spend their effort striving to implement those factors listed as satisfiers. These tend to be job enrichers and according to Herzberg will motivate workers and allow them to be more productive.

Abraham Maslow's "Hierarchy of Needs" should not be overlooked by managers. Too many workers interviewed complained of only being allowed to perform boring repetitive work. In order to reach the higher level needs such as self respect, stand out above the crowd, and the need to have increasing influence, workers need to be challenged mentally and physically on the job. Managers should strive to get the most out of each employee by

rotating all workers through the more demanding jobs. Boring, repetitive, or menial work should not be put off on one individual or crew for extended periods of time.

Keeping the above mentioned motivational theories in mind, the following list of specific recommendations is presented based solely on the findings of this research and this survey sample:

- 1) Study the dissatisfiers listed in Tables 2, 6, and 9, and either eliminate them or if it is a necessary policy, explain it to the craftsmen so they understand why the policy exist.
- 2) Focus on implementing the satisfiers listed in Tables 2, 6, and 9.
- 3) When working craftsmen in crews, practice the following:
 - a) Good communication (listen to a crew's ideas and give clear concise directions).
 - b) Plan the job early so you know the ins and outs of the job and have the needed tools and materials available.
 - c) Treat all crew members equally (no favoritism).
- 4) Don't Preach TQM to the workers, rather lead by example and use the principles of TQM in your leadership style. Drive out fear in your people so they will be willing to talk to you openly; thus giving you and them a better chance for success.
- 5) Learn the military regulations and the civilian personnel rules. Lack of education is the biggest reason why managers can be run over by their subordinates. Never allow subordinates to be lazy and get away with it.

- 6) Treat the military and civilians with equal respect and don't tolerate one group complaining about the other.
- 7) Give periodic written feedback to subordinates and discuss all evaluations with them face to face.
- 8) Continue to have shop parties periodically. Try to schedule them after major milestones or when projects are completed. Tie them into team performance.
- 9) Have a belief in and concern for people (theory Y) and use punishment sparingly in private.
- 10) Practice a participative style of management (TQM) and select an appropriate leadership strategy that takes into account the relative abilities and knowledge of those involved.

8.2 Future Research

There are three areas of research that need further study stemming from this research:

- 1) The Air Force needs a better measuring system to indicate if managers are really practicing the principles of TQM or just training their personnel and preaching TQM. This is an area which will require further research to determine the best means for evaluating managers on how they implement TQM.
- 2) The civilian appraisal and performance bonus system needs to be completely revamped. The workers have the perception the current system

isn't fair and this tends to render this system inadequate for encouraging improved worker performance.

3) The last area involves further research talking directly with the Air Force workers. A study should be done similar to this one which includes more personnel representing all major commands and the results distributed to Air Force managers. These results could be included as part of a supervisory training program.

APPENDICES

Appendix 1: Interview Questionnaire -- Civilian Craftsmen

1. What is your name?
2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter
3. How long have you been a _____?
4. Why did you become a _____?
5. What gives you the most job satisfaction?
6. What gives you the most job dissatisfaction?
7. How enjoyable is your work?
8. If you could do it all over again would you choose this profession?
9. Does society respect your talents and skills?
10. Has the quality of work improved or declined during your career?
(experiences?)
11. Do you take the job home with you?
12. How does your family feel about your profession?
13. What could your boss do to make you quit?
14. What could management do to make you quit?
15. Whose job opinion means the most to you?
16. How should a good supervisor manage a crew?
17. What makes a crew perform well together?
18. What are the reasons for poor crew performance?
19. Does your boss restrict you in your work capacity?
20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.
21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?
22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians? Explain.

23. Do you make more or less than your military counterparts with the same experience?
24. Does this create a problem at all in your workplace?
25. Do all the base closures and defense spending cuts bother you at all?
26. Have you been through total quality management training (TQM)?
27. Do you like or dislike TQM?
28. Do you think social functions add to job satisfaction?
29. Have you ever received a bonus? If so, why did you receive it?
30. Do you expect to get a raise every year? If so, why?

Appendix 2: Interview Questionnaire -- Military Craftsmen

1. What is your name?
2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter
3. How long have you been a _____?
4. Why did you become a _____?
5. What gives you the most job satisfaction?
6. What gives you the most job dissatisfaction?
7. How enjoyable is your work?
8. If you could do it all over again would you choose this profession?
9. Does society respect your talents and skills?
10. Has the quality of work improved or declined during your career?
(experiences?)
11. Do you take the job home with you?
12. How does your family feel about your profession?
13. What could your boss do to make you get out of the service?
14. What could management do to make you get out of the service?
15. Whose job opinion means the most to you?
16. How should a good supervisor manage a crew?
17. What makes a crew perform well together?
18. What are the reasons for poor crew performance?
19. Does your boss restrict you in your work capacity?
20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.
21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?
22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.
23. Do you make more or less than your civilian counterparts with the same experience?

24. Does this create a problem at all in your workplace?
25. Do all the base closures and defense spending cuts bother you at all?
26. Have you been through total quality management training (TQM)?
27. Do you like or dislike TQM?
28. Do you think social functions add to job satisfaction?
29. Does it bother you when civilians get bonuses and the military members do not.
30. Do you expect to get a raise every year? If so, why?

Appendix 3: Interview Results (Civilians)

1. What is your name?

Civilian #1

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Carpenter

3. How long have you been a _____?

23 years (13 in civil service)

4. Why did you become a _____?

Enjoyed it as a hobby first and then pursued it professionally.

5. What gives you the most job satisfaction?

Job recognition by peers and customers.

6. What gives you the most job dissatisfaction?

Big jobs that aren't planned and organized well.

7. How enjoyable is your work?

Overall I enjoy my work.

8. If you could do it all over again would you choose this profession?

I would always be a carpenter but maybe on the side not full time.

9. Does society respect your talents and skills?

No, people really don't understand everything we do.

10. Has the quality of work improved or declined during your career? (experiences?)

Faster now, but it's really not better quality. Maybe a little worse because people try to save money and go with cheaper designs and cheaper materials. The materials themselves are also worse than in the past.

11. Do you take the job home with you?

No, I leave it here but if something stumps me I will think about it later.

12. How does your family feel about your profession?

They seem to like it . As long as I'm happy. They love asking me advice on building different things.

13. What could your boss do to make you quit?

Nothing, but I really value my integrity and I would hate for someone to ask me to sacrifice it.

14. What could management do to make you quit?

Nothing.

15. Whose job opinion means the most to you?

Peers.

16. How should a good supervisor manage a crew?

- Manage the job
- Listen to the craftsmen because most of them can help manage the job better and give good ideas

17. What makes a crew perform well together?

- People understanding their job
- Everyone has to like each other
- Must have fun and enjoy being around each other

18. What are the reasons for poor crew performance?

One bad apple can destroy the whole team

19. Does your boss restrict you in your work capacity?

No, they have confidence in me and let me do my job. This used to be bad but has gotten better in the last five years.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes, most all the time.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes, I used to work for AAFES and travel around alot doing different jobs.

We would have engineering, drafting, craftsmen, foremen and everyone together for a review before the construction started. This form of participation seemed to work very well. Planners and engineers should ask the

craftsmen for advice alot more often and they should get out of the office and see how things are put together more often. Projects like self help can really screw things up bad because neither engineers nor craftsmen are consulted prior to construction, then we have to come in and fix their problems.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians? Explain.

Civilian

23. Do you make more or less than your military counterparts with the same experience?

About the same I think.

24. Does this create a problem at all in your workplace?

No, but there are other problems. The military tend to have too many appointments and extra duties to get the work done properly, they start something and we have to finish it. The young airmen are loosing out because they are treated like step children all the time (litter patrol, cut grass, etc.).

Airmen don't learn enough in school and books and they need the OJT to become good craftsmen. This leads to the Airmen having no self motivation and they seem to be very unhappy. I think maybe they are telling the young Airmen in Tech school that the Civilians are lazy and worthless and to try to avoid us.

25. Do all the base closures and defense spending cuts bother you at all?

Yes, they are going about it too fast. I understand some of it but the way they do it doesn't make sense sometimes. We could be in trouble if we ever get into another war.

26. Have you been through total quality management training (TQM)?

Yes

27. Do you like or dislike TQM?

Like it. It's late but it will work but not overnight. There are too many people that won't change their philosophy overnight. These people will forget the principles quickly if they don't have reminders. Some of the people teaching

this stuff don't seem to really understand it and that makes it boring and hard to understand for the people being trained.

28. Do you think social functions add to job satisfaction?

Yes, I like shop level parties the best but it is important to have squadron level parties also. It is very important for the civilians and military to intermingle in a social setting and get to know one another.

29. Do you feel the appraisal and performance bonus system is fair and equitable?

Nothing is really fair, there should be a set price for a set rating. They need to do away with the percent of your salary bonus. They should spread the bonuses around more and do away with the quotas. It would be much more effective for morale if they would give a bunch of people \$25 bucks as opposed to giving a few people large awards. The money is really not that important anyway, it's the recognition that means the most. Sometime you have a supervisor who doesn't like to write or can't write very well and so all his people don't get good awards and they suffer, this isn't really fair.

30. Do you expect to get a raise every year? If so, why?

No, not really. They should have a range and if you perform low you should be in the bottom range and if you perform well they should put you in the upper part of the range.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #2

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Electrician

3. How long have you been a _____?

12-13 years

4. Why did you become a _____?

Didn't know any better. It was a good skill and I knew an electrician who helped me get started.

5. What gives you the most job satisfaction?

It is challenging and it makes you think.

6. What gives you the most job dissatisfaction?

Some jobs can become repetitive and monotonous.

7. How enjoyable is your work?

Tolerable.

8. If you could do it all over again would you choose this profession?

No, I would get out of the nuts and bolts manual labor.

9. Does society respect your talents and skills?

No, some people look down on us as dirty construction workers but some do appreciate us a little.

**10. Has the quality of work improved or declined during your career?
(experiences?)**

No, not within the civil service.

11. Do you take the job home with you?

No.

12. How does your family feel about your profession?

My wife likes the steady work and my dad likes the skill I learned.

13. What could your boss do to make you quit?

Quit paying me, or hound me all the time about my job.

14. What could management do to make you quit?

The system needs more accountability for its people, some work and some goof off and know one cares. They try to save too much on expenses for the people (break rooms, tools, etc.) but then they waste money in other areas. It's so screwed up they should throw the book out and start over.

15. Whose job opinion means the most to you?

Mine.

16. How should a good supervisor manage a crew?

The supervisor should know the craft and job and get more involved in what his people are doing.

17. What makes a crew perform well together?

Trust, each person needs to carry their fair share.

18. What are the reasons for poor crew performance?

- Guys not doing their work, but telling you how to do yours
- One screw up can ruin a crew
- One guy trying to override the crew leader and tell everyone how to do it

19. Does your boss restrict you in your work capacity?

Yes, lack of materials slow you down, ruin your work, and make you look bad.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Sometimes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes, it would save time and rework.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians? Explain.

Military, and it really doesn't create any problems.

23. Do you make more or less than your military counterparts with the same experience?

More

24. Does this create a problem at all in your workplace?

They have an attitude problem against civilians.

25. Do all the base closures and defense spending cuts bother you at all?

I watch it.

26. Have you been through total quality management training (TQM)?

Yes

27. Do you like or dislike TQM?

Might work if the upper management takes it seriously.

28. Do you think social functions add to job satisfaction?

No, I would rather get to go home early. This would boost moral more than a party.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, the award should be given at the time of the performance to be effective.

30. Do you expect to get a raise every year? If so, why?

Yes, we should get more than a cost of living raise every year. Management gets big raises why don't we.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #3

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Electrician

3. How long have you been a _____?

15 years

4. Why did you become a _____?

Took a test to go in the Army and that's where they put me.

5. What gives you the most job satisfaction?

Accomplishing the task at hand.

6. What gives you the most job dissatisfaction?

Liberals, keep making stupid environmental and safety regulations. Now we can't drill through a stupid wall because they say it might have asbestos in it. So now we waste money and time for no good reason. It is just a bunch of liberal scare tactics.

7. How enjoyable is your work?

Tolerable.

8. If you could do it all over again would you choose this profession?

No, I would rather have a job where I work with people.

9. Does society respect your talents and skills?

I really don't care what they think.

10. Has the quality of work improved or declined during your career? (experiences?)

The same.

11. Do you take the job home with you?

No.

12. How does your family feel about your profession?

They respect me as an electrician, but civil service has a bad name and they think we are a bunch of goof offs.

13. What could your boss do to make you quit?

Nothing, all I have to do is cry Union and they always back down. The bosses hands are completely tied and they are scared to make decisions because they know they employee will always win.

14. What could management do to make you quit?

I want to quit now but can't. It's just a big show for the generals, they don't care how it really works or saves money as long as it looks pretty. They should throw the book out and start over.

15. Whose job opinion means the most to you?

My own.

16. How should a good supervisor manage a crew?

- Know his people and know the job himself inside and out or his people will just tell him anything and he will believe it. Some bosses don't want to know anything, they just say you handle it.

17. What makes a crew perform well together?

Everyone respecting each others skills and talents.

18. What are the reasons for poor crew performance?

Too many jack of all trades with the zonal concept. An electrician should not have to do the work of a plumber, it hurt performance and moral.

19. Does your boss restrict you in your work capacity?

Yes, because the supply system is screwed up, most of the procedures are outdated, and the restrictive environmental and safety laws almost tie our hands from being more productive.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

No, I gave up trying to improve things years ago.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

No, it wouldn't do any good at all.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians? Explain.

Military, no problem.

23. Do you make more or less than your military counterparts with the same experience?

Less.

24. Does this create a problem at all in your workplace?

They don't earn their money and they aren't trained well enough.

25. Do all the base closures and defense spending cuts bother you at all?

Don't care because I can't control it.

26. Have you been through total quality management training (TQM)?

Yes

27. Do you like or dislike TQM?

It won't work because nothing is established or will ever get accomplished on this, it's just a waste of time

28. Do you think social functions add to job satisfaction?

No, I'd rather have the time off.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, it's a quota system and should be trashed. Its just pure favoritism so they can give their buddies extra money.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #4

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Plumber

3. How long have you been a _____?

30 years

4. Why did you become a _____?

Family tradition, father, brother, etc. I started in the military and continued afterwards.

5. What gives you the most job satisfaction?

Customer satisfaction, helping others with water and heat problems.

6. What gives you the most job dissatisfaction?

- Someone telling me how to do my job
- Too many bosses telling me what to do, no respect for my talents
- Pointless tests which have to be performed before we can work in an area (safety). Cause us to lose time and sit and wait for the tester to show up.

7. How enjoyable is your work?

Very, Different task and customer service.

8. If you could do it all over again would you choose this profession?

Yes, but I might own my own business to make more money.

9. Does society respect your talents and skills?

No, they think we make too much money for what we do, but we really don't. You find someone else to go down there and repair the sewers and crap that we work on. You should see what comes out of some of this stuff.

10. Has the quality of work improved or declined during your career? (experiences?)

Better, the tools and equipment make the job easier. We can pre-fab stuff in the shop and place in the field.

11. Do you take the job home with you?

No, some people want me to but I refuse to.

12. How does your family feel about your profession?

My wife thinks I'm goofing off all day. I show her the dirt and she thinks I put it on there before I came home. Overall they are appreciative though.

13. What could your boss do to make you quit?

Nothing.

14. What could management do to make you quit?

They need to get better control of the personnel, some people screw off all the time and we get behind. The bosses don't care and nothing gets done about it.

15. Whose job opinion means the most to you?

My own.

16. How should a good supervisor manage a crew?

Go out in the field more often.

17. What makes a crew perform well together?

Bad moral and people telling others how to do their job.

18. What are the reasons for poor crew performance?

One bad person tends to stop the job.

19. Does your boss restrict you in your work capacity?

Yes, the safety and environmental restrictions really slow me down.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes, they always want to make things better.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes, they should let us do our jobs and when we have questions they should let us talk.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians?

Explain.

Civilian

23. Do you make more or less than your military counterparts with the same experience?

More.

24. Does this create a problem at all in your workplace?

They get what they earn, they have too many meetings and extra duties.

25. Do all the base closures and defense spending cuts bother you at all?

Don't care.

26. Have you been through total quality management training (TQM)?

Yes

27. Do you like or dislike TQM?

No, management feels like the workers will show them up if they let us participate so we won't ever get to.

28. Do you think social functions add to job satisfaction?

No, give me the time off.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, if it is fair then publish the results for everyone to see. I need to know what everyone else is getting so I can have something to motivate me or model myself after.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #5

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Equipment Operator

3. How long have you been a _____?

30 years (17 years civil service)

4. Why did you become a _____?

Started off as a laborer and worked my way up by apprentice to equipment.

5. What gives you the most job satisfaction?

Look back and see a finished product and a happy customer.

6. What gives you the most job dissatisfaction?

Supervisor or superintendent finding small discrepancies and only looking at those. You could do a great job and they will point out one mistake.

Everyone might have their own way of doing something.

7. How enjoyable is your work?

It's not at all right now.

8. If you could do it all over again would you choose this profession?

Yes, I enjoy being outdoors. I am also a master barber but I don't like being inside all day.

9. Does society respect your talents and skills?

Some do and some don't, alot of people don't consider us craftsmen. People think we are the bottom of the bucket and anyone could drive a piece of equipment.

10. Has the quality of work improved or declined during your career? (experiences?)

Declined, the training isn't as good. Military tech school is good but the airmen aren't getting the proper OJT.

11. Do you take the job home with you?

Sometimes, and my wife can really tell.

12. How does your family feel about your profession?

They like it because of the good money.

13. What could your boss do to make you quit?

It would be very hard, maybe if he struck me, but I think I'm level headed and I could deal with anything. You really have to know how to swallow your pride sometimes.

14. What could management do to make you quit?

Deny me my rights as a veteran (veterans preference). The promotion system is really bad, time in grade and experience should count more, instead they simply promote their buddies.

15. Whose job opinion means the most to you?

My own and that of my customer.

16. How should a good supervisor manage a crew?

- Treat the people the same way they would want to be treated if they were on the crew
- Go to bat for your people when they need you

- Let people make tiny mistakes on their own and don't always correct them
- Should realize at one time they were workers and they should relate to them

17. What makes a crew perform well together?

- Can read one another and click off each others actions
- Unity, everyone should know what they have to do
- Everyone pulling their own weight

18. What are the reasons for poor crew performance?

People don't like one another and the leader can't get them to perform if they don't like him either

19. Does your boss restrict you in your work capacity?

Yes, need trust me and my experience more.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

I suggested something once and I'm not good at wording things so I asked him about helping me submit, he didn't want to help me. I submitted the suggestion anyway and they shot it down for no good reason, so I'm never suggesting anything again.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

No, if the supervisor assigns a job and it is done correctly then he should give a complement. They always look for one discrepancy and piss me off so I don't want to help them out at all.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians? Explain.

Civilian, but I will say this the military don't treat us with enough respect. They bad mouth us and treat us like basics, hell I served in the Korean war and I don't need that crap. I have many years with the US government and deserved to be treated that way.

23. Do you make more or less than your military counterparts with the same experience?

Never really thought about it, two different systems.

24. Does this create a problem at all in your workplace?

No

25. Do all the base closures and defense spending cuts bother you at all?

Yes I wonder when the next hit is, if I can just make it to retirement before we get on the closure list. Hell, I already got a letter wanting me to retire, I can't live on \$700 a month right now.

26. Have you been through total quality management training (TQM)?

Yes

27. Do you like or dislike TQM?

Sometimes it is just used as a bitch session for a few people. We need more people to quit being afraid and speak their mind.

28. Do you think social functions add to job satisfaction?

Shop parties are good but above that it gets too big.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, the system isn't fair and if one guy gets the money and another doesn't it tears down the team. It should be given to the entire team to distribute. The quota system they use just isn't fair, if everyone is doing good the boss shouldn't be forced to give bad ratings to meet his quota.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #6

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Equipment Operator

3. How long have you been a _____?

21.5 years

4. Why did you become a _____?

Started off working horticulture and garden operator, like the tractor worked so I evolved into a full time operator.

5. What gives you the most job satisfaction?

Taking a piece of machinery and doing fine work with it.

6. What gives you the most job dissatisfaction?

Not being allowed to complete the job. Hate to pick up and move before the job is finished.

7. How enjoyable is your work?

It is enjoyable.

8. If you could do it all over again would you choose this profession?

Yes, I wish I would've done it sooner.

9. Does society respect your talents and skills?

Many people don't understand what the job consist of, they think we are dumb. Other crafts specialize so much they won't pick up a shovel or do anything outside their craft, we do what it takes to get the job.

10. Has the quality of work improved or declined during your career? (experiences?)

There are operator and there are drivers and there is a big difference between the two. The quality has probably declined.

11. Do you take the job home with you?

No, never.

12. How does your family feel about your profession?

They know I enjoy it so they do to.

13. What could your boss do to make you quit?

Nothing, if your boss is stressing you out you have to change your way of thinking and deal with the job. As you get older you learn to deal with the stress better.

14. What could management do to make you quit?

The promotion system is very bad. Seniority and time in grade should count more towards promotion, instead it's who you know.

15. Whose job opinion means the most to you?

My own opinion. If you can't please yourself you can't please anyone else.

16. How should a good supervisor manage a crew?

- Supervisor position is tough because he is responsible for our work and sometimes has little control over us
- All in all he should trust the men to do their work, that's why they are hired
- Allow the men to come to you if you have a problem

17. What makes a crew perform well together?

- Everyone pulling their own weight.
- Competition between crews

18. What are the reasons for poor crew performance?

- Have to rush everything to get finished.
- Military who don't want to be equipment operators and therefore aren't motivated and screw things up
- People that don't want to work
- Operators get shit on because we are the jack of all trades, bad for moral
- Favoritism

19. Does your boss restrict you in your work capacity?

No, I don't think the jobs we do are very hard and they don't require much creativity

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Have had some success, probably more than rejections.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

- Don't feel the supervisor should ask me who I want to work with, that's his job
- Better to allow the supervisor to make decisions and provide direction

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians? Explain.

Civilian, but when I had a military I noticed some were book smart and got promoted but they didn't know anything about running equipment.

23. Do you make more or less than your military counterparts with the same experience?

Its apples and oranges, different jobs.

24. Does this create a problem at all in your workplace?

No, military have other duties and things we don't have.

25. Do all the base closures and defense spending cuts bother you at all?

I watch it very close to see if I will lose my job.

26. Have you been through total quality management training (TQM)?

Yes

27. Do you like or dislike TQM?

There are many people afraid to speak up which hurts the program. If more people got involved it might work.

28. Do you think social functions add to job satisfaction?

Shop parties are very good.

29. Do you feel the system of appraisals and performance bonuses is fair?

If the system can't be improved then they should throw it out and give us a pat on the back if we do something good, this would mean more to us.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #7

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Electrician

3. How long have you been a _____?

13 years (WG-10)

4. Why did you become a _____?

Friend had an electrical shop and I needed a job to support college bills

5. What gives you the most job satisfaction?

Satisfying my customer.

6. What gives you the most job dissatisfaction?

Too many hours and not enough pay. Too many bosses that don't know the field at all.

7. How enjoyable is your work?

I love my job with the government compared to the outside world.

8. If you could do it all over again would you choose this profession?

Yes.

9. Does society respect your talents and skills?

Just starting to know the importance that we play in day to day life.

**10. Has the quality of work improved or declined during your career?
(experiences?)**

It has improved.

11. Do you take the job home with you?

Yes, all the time.

12. How does your family feel about your profession?

They think it is very interesting.

13. What could your boss do to make you quit?

Nothing I guess.

14. What could management do to make you quit?

Reduction in force.

15. Whose job opinion means the most to you?

National Electric Code is all that counts.

16. How should a good supervisor manage a crew?

Balance the work load evenly among all the crew members.

17. What makes a crew perform well together?

Work as a team and listen to everyone's inputs and opinions.

18. What are the reasons for poor crew performance?

My way or the highway type bosses.

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians?

Explain.

Civilian, and he's a good man.

23. Do you make more or less than your military counterparts with the same experience?

More money.

24. Does this create a problem at all in your workplace?

They have other benefits that compensate for the difference.

25. Do all the base closures and defense spending cuts bother you at all?

Yes.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

I like what they're doing.

28. Do you think social functions add to job satisfaction?

Yes, within our teams and shops.

29. Do you feel the system of appraisals and performance bonuses is fair?

I got a bonus one time for Christmas, other than that I don't know much about it.

30. Do you expect to get a raise every year? If so, why?

Yes.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #8

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Carpenter

3. How long have you been a _____?

14 years (WG-9)

4. Why did you become a _____?

I was a painter and I had to switch due to medical reasons.

5. What gives you the most job satisfaction?

The satisfaction of building a structure that will be there for awhile.

6. What gives you the most job dissatisfaction?

The way the zonal maintenance concept makes you crossover and do painting and other duties. I would rather just do carpentry. The old way was better because we did big jobs and stayed busy, smaller jobs aren't rewarding and we don't stay as busy.

7. How enjoyable is your work?

Not very enjoyable right now. They put all the civilians in the zones and left all the military in heavy repair. They get all the good jobs and we have to do small stuff.

8. If you could do it all over again would you choose this profession?

Yes, I like using my mind and imagination.

9. Does society respect your talents and skills?

Yes, but not in the civil service profession. They require us to do too much crossover work and therefore we aren't true woodworkers.

10. Has the quality of work improved or declined during your career? (experiences?)

Improved, boss gets us better equipment all the time.

11. Do you take the job home with you?

No I leave it at work.

12. How does your family feel about your profession?

Positive, they like me to do work for them.

13. What could your boss do to make you quit?

Nothing, I have too many years invested.

14. What could management do to make you quit?

Nothing.

15. Whose job opinion means the most to you?

Customers they are the people I work for.

16. How should a good supervisor manage a crew?

- Treat everyone equal, no favoritism or kissing up
- Should be able to talk to your people

17. What makes a crew perform well together?

- Working together
- Carrying you own fair share
- Boss that is willing to work with you and do the work you are doing

18. What are the reasons for poor crew performance?

Hostilities and personality conflicts.

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes, the boss lets me handle the job.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes, we already work alot by ourselves in this new concept.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians?

Explain.

Civilian, but it doesn't matter if they are in the military each person is different regardless of their status.

23. Do you make more or less than your military counterparts with the same experience?

Don't know and don't care.

24. Does this create a problem at all in your workplace?

Comparing apples and oranges.

25. Do all the base closures and defense spending cuts bother you at all?

Don't even worry about it.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

How can you change something that's been this way for years?

28. Do you think social functions add to job satisfaction?

No, socializing and work can lead to problems, especially when people start to drink. People always match up in click anyway. Shop parties with no alcohol are the only way to go.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, some people always get bonuses based on who they know.

30. Do you expect to get a raise every year? If so, why?

For what I do I make good money. Raises should be based on the economy, but I'm happy either way.

Interview Questionnaire – Civilian Craftsmen

1. What is your name?

Civilian #9

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Carpenter

3. How long have you been a _____?

25 years

4. Why did you become a _____?

I liked it and it was readily available to make a living. I like to use my hands and build something. It is a great skill to know.

5. What gives you the most job satisfaction?

Building a structure. Learning from each thing I build. I enjoy working with people and being outdoors. It's not repetitious.

6. What gives you the most job dissatisfaction?

Not organizing and not having the proper materials available for the job.

7. How enjoyable is your work?

Yes, it is enjoyable.

8. If you could do it all over again would you choose this profession?

I think I would've stayed in school.

9. Does society respect your talents and skills?

Yes.

**10. Has the quality of work improved or declined during your career?
(experiences?)**

Improved, better equipment. The only exception is the old German style construction is still the best.

11. Do you take the job home with you?

Sometimes, but I'm not obsessed with it.

12. How does your family feel about your profession?

They like it. My father was retired military.

13. What could your boss do to make you quit?

Nothing.

14. What could management do to make you quit?

Nothing.

15. Whose job opinion means the most to you?

Mine.

16. How should a good supervisor manage a crew?

- Be there and listen to their ideas
- Explain things well, good communication
- Fairness, no favoritism

17. What makes a crew perform well together?

- Good communication among members
- Like to work with people on an equal basis
- All team members are equal

18. What are the reasons for poor crew performance?

- Personality conflicts

- People don't have the experience they think they have

- People not carrying their fair share

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians?

Explain.

Civilian, it doesn't matter (depends on the person).

23. Do you make more or less than your military counterparts with the same experience?

More.

24. Does this create a problem at all in your workplace?

Occasionally the military will complain they are underpaid.

25. Do all the base closures and defense spending cuts bother you at all?

Yes, it does concern me. I love my job and don't want to ever give it up. I'm still junior because I wasn't in the military, thus I am vulnerable to be the first to go.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

If they would really implement it could work. I doubt if they will actually empower the worker. Who knows, it might work.

28. Do you think social functions add to job satisfaction?

Yes, squadron and shop parties are good.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, the same people seem to always get the big bonuses, whoever is a suck ass gets the bonus. Goof offs get money and it doesn't make sense. It really doesn't bother me that much though.

30. Do you expect to get a raise every year? If so, why?

I like to get a cost of living raise.

Interview Questionnaire – Civilian Craftsmen

1. What is your name?

Civilian #10

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Plumber

3. How long have you been a _____?

25 years

4. Why did you become a _____?

I was good at it and wanted to better myself.

5. What gives you the most job satisfaction?

The challenge of doing a particular job.

6. What gives you the most job dissatisfaction?

Lazy helpers and inexperienced craftsmen.

7. How enjoyable is your work?

I find my work enjoyable.

8. If you could do it all over again would you choose this profession?

Yes.

9. Does society respect your talents and skills?

No, they don't appreciate it.

10. Has the quality of work improved or declined during your career? (experiences?)

Improved.

11. Do you take the job home with you?

No.

12. How does your family feel about your profession?

It's a job.

13. What could your boss do to make you quit?

Nothing.

14. What could management do to make you quit?

Nothing.

15. Whose job opinion means the most to you?

Mine.

16. How should a good supervisor manage a crew?

Stay out of our way.

17. What makes a crew perform well together?

Good leadership and empowerment of the workers.

18. What are the reasons for poor crew performance?

People not knowing the job well enough.

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians?

Explain.

Civilian, no.

23. Do you make more or less than your military counterparts with the same experience?

I don't know.

24. Does this create a problem at all in your workplace?

No.

25. Do all the base closures and defense spending cuts bother you at all?

No.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

I like it and it sounds like alot of fun to get involved.

28. Do you think social functions add to job satisfaction?

Yes, shop parties.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, it should be based more on job knowledge than on favoritism.

30. Do you expect to get a raise every year? If so, why?

Yes, because we do the job better than the contractors they hire.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #11

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Plumber

3. How long have you been a _____?

13 years.

4. Why did you become a _____?

I got married and needed a steady income.

5. What gives you the most job satisfaction?

The pay is good and knowing there is always a demand for plumbers.

6. What gives you the most job dissatisfaction?

The weather, either too cold or too hot is bad.

7. How enjoyable is your work?

Very.

8. If you could do it all over again would you choose this profession?

No, I would choose something else.

9. Does society respect your talents and skills?

No, they have no respect for us.

10. Has the quality of work improved or declined during your career? (experiences?)

Improved very much in all areas.

11. Do you take the job home with you?

Yes.

12. How does your family feel about your profession?

They like the steady income that it brings us. It has always given us what we need in our lives.

13. What could your boss do to make you quit?

If he wouldn't appreciate the things I help bring this shop.

14. What could management do to make you quit?

Keep this RIF going on.

15. Whose job opinion means the most to you?

My coworker-workers.

16. How should a good supervisor manage a crew?

- Treat everybody with respect
- Show each person their opinion counts

17. What makes a crew perform well together?

The personalities and everyone knowing their job.

18. What are the reasons for poor crew performance?

- Can't get along with each other
- Don't know their jobs
- Don't focus on the task at hand

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Sometimes if he feels like it.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians?

Explain.

Civilian.

23. Do you make more or less than your military counterparts with the same experience?

More.

24. Does this create a problem at all in your workplace?

No.

25. Do all the base closures and defense spending cuts bother you at all?

Yes.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

I like it if they would really enforce it, but the AF doesn't.

28. Do you think social functions add to job satisfaction?

Yes, shop and some squadron.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, bonuses should be given to the shop as a group.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #12

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Plumber

3. How long have you been a _____?

30 years

4. Why did you become a _____?

The money was good.

5. What gives you the most job satisfaction?

Knowing you have done good work for the customer.

6. What gives you the most job dissatisfaction?

Knowing that some plumbers are doing poor work and giving us a bad name.

7. How enjoyable is your work?

Yes.

8. If you could do it all over again would you choose this profession?

Yes.

9. Does society respect your talents and skills?

Yes.

**10. Has the quality of work improved or declined during your career?
(experiences?)**

Yes.

11. Do you take the job home with you?

Yes, I am always trying to think of better ways to inspect and do the work.

12. How does your family feel about your profession?

They think its OK, they get everything they need.

13. What could your boss do to make you quit?

Nothing.

14. What could management do to make you quit?

Close the base.

15. Whose job opinion means the most to you?

Mine.

16. How should a good supervisor manage a crew?

- Have everything ready the crew will need to do the job

17. What makes a crew perform well together?

Everyone carry their own weight and not have people sitting around doing nothing.

18. What are the reasons for poor crew performance?

Some men doing all the work and others doing nothing.

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians?

Explain.

Civilian

23. Do you make more or less than your military counterparts with the same experience?

More.

24. Does this create a problem at all in your workplace?

I don't know.

25. Do all the base closures and defense spending cuts bother you at all?

Yes.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

It's OK, because you can at least talk about ways to make things better.

28. Do you think social functions add to job satisfaction?

Yes, shop.

29. Do you feel the system of appraisals and performance bonuses is fair?

No.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Civilian Craftsmen

1. What is your name?

Civilian #13

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Equipment Operator

3. How long have you been a _____?

5 years.

4. Why did you become a _____?

Enjoy the outdoors and equipment.

5. What gives you the most job satisfaction?

Start the job and finish it beginning to end and working a variety of different machines.

6. What gives you the most job dissatisfaction?

- Being pulled off a job early

- Taking something to maintenance and getting blamed for something wrong with it. We have multiple people using the equipment and they expect it to be showroom clean. How can you pour concrete and dig and not get the equipment scratched and dirty.

7. How enjoyable is your work?

Yes it is enjoyable.

8. If you could do it all over again would you choose this profession?

Yes, nothing is perfect.

9. Does society respect your talents and skills?

Yes.

10. Has the quality of work improved or declined during your career? (experiences?)

Better.

11. Do you take the job home with you?

Rare but sometimes if I have to work late and it disrupts my plans.

12. How does your family feel about your profession?

They like it because I have the weekends off, other construction workers have to work the weekends.

13. What could your boss do to make you quit?

Nothing, I don't worry about discrimination or anything because I could easily go above his head.

14. What could management do to make you quit?

I don't like the RIF going on. Workers with excellent records get demoted.

15. Whose job opinion means the most to you?

My immediate supervisor.

16. How should a good supervisor manage a crew?

- Follow through from beginning to end
- Check the work
- Get feedback
- Have a good plan
- Ask the worker his opinion

17. What makes a crew perform well together?

team work

18. What are the reasons for poor crew performance?

Personality clashes and quick shoddy work

19. Does your boss restrict you in your work capacity?

No, but he does piss me off sometimes by saying he is going to put all the old guys on this and the young guys on that.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If military, do you think your boss understands the differences between supervising military and civilians? Explain.

Military, he is tighter on the rules and creates double standards. He will put up training boards for the military and nothing for the civilians. Military tend to get too care free before they retire or get out.

23. Do you make more or less than your military counterparts with the same experience?

More, due to overtime.

24. Does this create a problem at all in your workplace?

No, but there is animosity for other reasons.

25. Do all the base closures and defense spending cuts bother you at all?

Yes, I worry about my job.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

Yes, but different people define quality different ways. If a General is coming on base and we do all this stupid and wasteful stuff it really sets TQM back.

28. Do you think social functions add to job satisfaction?

Yes, shop. Don't understand why we can't have alcohol.

29. Do you feel the system of appraisals and performance bonuses is fair?

No, if you do poor you shouldn't get a bonus.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Appendix 4: Interview Results - Military Craftsmen

1. What is your name?

Military #1, SSgt

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Equipment Operator

3. How long have you been a _____?

5 years (3.5 years in avionics before that)

4. Why did you become a _____?

No choice, had to come to Wilford Hall in San Antonio because my son was sick and this was all they had available.

5. What gives you the most job satisfaction?

Start with nothing and build a tangible structure. Its better than being behind a desk all day.

6. What gives you the most job dissatisfaction?

We always jump through hoops for big dignitaries when they come on base. We might be fixing a broke water main and they will make us fill the hole in and wait until he's gone and then we have to dig it up again, its stupid. We ran the sweeper on one street for three days. Then they cut people because they say we don't have enough money.

7. How enjoyable is your work?

Overall I do enjoy it.

8. If you could do it all over again would you choose this profession?

Yes, I had no choice.

9. Does society respect your talents and skills?

Some, the people who need the work done love us, but everyday people view us as a big nuisance.

**10. Has the quality of work improved or declined during your career?
(experiences?)**

Better now, they tend to ask for our inputs more and they tend to have a more genuine concern for the worker.

11. Do you take the job home with you?

Yes, when I first came into it I was bitter and I hated it. Now I leave it and things work out better.

12. How does your family feel about your profession?

Feel the same as me about it.

13. What could your boss do to make you get out of the service?

No, one person can't make me quit. He'll be gone soon enough and I won't sacrifice my career for one person.

14. What could management do to make you get out of the service?

If they offered a 15 year retirement I would consider it. I am not really supportive of the draw down in forces and gays in the military. I don't like the overall direction we are headed in now, even the President seems to not care about us or the military.

15. Whose job opinion means the most to you?

My boss.

16. How should a good supervisor manage a crew?

Should know the job well enough or ask the craftsmen for inputs.

17. What makes a crew perform well together?

team work

18. What are the reasons for poor crew performance?

Dictatorships, hot weather, and supervisor rushing the job.

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes, it gives me more satisfaction.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Military, it doesn't matter to me.

23. Do you make more or less than your civilian counterparts with the same experience?

Less, but the benefits off set it.

24. Does this create a problem at all in your workplace?

No.

25. Do all the base closures and defense spending cuts bother you at all?

Yes, I am considered about losing my job and also about how weak they are making the military.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

- In some ways they are loosening the reins too much, you need a balance
- People are set in their ways and some things won't change (Generals coming on base for inspections)
- They need to use common sense
- Generals ought to be treated like the rest of us and not disrupt our work

28. Do you think social functions add to job satisfaction?

Yes, best at shop (squadron is too big).

29. Does it bother you when civilians get bonuses and the military members do not.

Apples and oranges, we get time off, awards, decorations, promotions, etc.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Military Craftsmen

1. What is your name?

Military #2, TSgt

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Plumber

3. How long have you been a _____?

3 years

4. Why did you become a _____?

The AF merged my old job as a water and waste water technician with the plumbing career field.

5. What gives you the most job satisfaction?

Creating new programs to test and satisfying the customer.

6. What gives you the most job dissatisfaction?

It is an unhealthy work environment.

7. How enjoyable is your work?

Not too bad. The only bad thing about it is the total civilian atmosphere here.

8. If you could do it all over again would you choose this profession?

Yes, I would've preferred to stay in the water and waste water business though.

9. Does society respect your talents and skills?

No! People have absolutely no respect for plumbers.

10. Has the quality of work improved or declined during your career? (experiences?)

Declined, civilian and military climates are totally different.

11. Do you take the job home with you?

Sometimes when I have additional paperwork to complete, but its not that bad.

12. How does your family feel about your profession?

They don't have any problems with it.

13. What could your boss do to make you get out of the service?

Nothing.

14. What could management do to make you get out of the service?

Nothing.

15. Whose job opinion means the most to you?

Supervisor and everyone above him in management.

16. How should a good supervisor manage a crew?

- Give the crew the opportunity to excel, be it good or bad
- Let the individuals handle the job from top to bottom

17. What makes a crew perform well together?

- The right attitude
- Support from the boss
- Good training
- People being allowed to try new techniques

18. What are the reasons for poor crew performance?

- Lack of training
- Bad attitude
- No support from management

19. Does your boss restrict you in your work capacity?

Sometimes he discourages me from volunteering for additional duties because I will be away from the job too much.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes, always favorably.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Civilian, sometimes he 's pretty good about it and gives you the opportunity to excel. Better than alot of civilians I've seen.

23. Do you make more or less than your civilian counterparts with the same experience?

Don't know and don't care.

24. Does this create a problem at all in your workplace?

Sometimes they get overtime and we don't get paid for it.

25. Do all the base closures and defense spending cuts bother you at all?

Yes.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

Yes, it gives the worker more control of his work environment.

28. Do you think social functions add to job satisfaction?

Yes, at all levels.

29. Does it bother you when civilians get bonuses and the military members do not.

No.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire – Military Craftsmen

1. What is your name?

Military #3, Airmen First Class

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Plumber

3. How long have you been a _____?

2.5 years

4. Why did you become a _____?

Enlisted and this is where they put me.

5. What gives you the most job satisfaction?

Hands on hard work.

6. What gives you the most job dissatisfaction?

Favoritism and laziness among a few workers.

7. How enjoyable is your work?

Mostly enjoyable.

8. If you could do it all over again would you choose this profession?

I chose something else and they stuck me here anyway.

9. Does society respect your talents and skills?

No, I don't think they realize exactly how hard a job it really is.

10. Has the quality of work improved or declined during your career? (experiences?)

Improved.

11. Do you take the job home with you?

I try to leave it at work but it ends up at home anyway.

12. How does your family feel about your profession?

They think it is too hard on me.

13. What could your boss do to make you get out of the service?

Nothing.

14. What could management do to make you get out of the service?

Nothing.

15. Whose job opinion means the most to you?

Mine and my foremen.

16. How should a good supervisor manage a crew?

Equal treatment and getting everyone's opinion on the job.

17. What makes a crew perform well together?

Stick together, work together, and respect one another.

18. What are the reasons for poor crew performance?

Fighting amongst each other and everyone not carrying their load.

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Military, no problem.

23. Do you make more or less than your civilian counterparts with the same experience?

About the same.

24. Does this create a problem at all in your workplace?

No.

25. Do all the base closures and defense spending cuts bother you at all?

No.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

I like it I think it helps to let us solve some of the problems.

28. Do you think social functions add to job satisfaction?

Yes, squadron and shop.

29. Does it bother you when civilians get bonuses and the military members do not.

Yes.

30. Do you expect to get a raise every year? If so, why?

No.

Interview Questionnaire – Military Craftsmen

1. What is your name?

Military #4, SSgt

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Carpenter

3. How long have you been a _____?

8 years, (12 years as a mason before they merged the two)

4. Why did you become a _____?

The AF placed me here, I didn't choose it.

5. What gives you the most job satisfaction?

The satisfaction of seeing something built, large projects are more satisfying than maintenance work.

6. What gives you the most job dissatisfaction?

Supervisor making you look bad on the job site as opposed to pulling you aside and allowing you to fix the problem.

7. How enjoyable is your work?

Very enjoyable.

8. If you could do it all over again would you choose this profession?

Yes, I would do it the same except study the books more. Because I don't test well I haven't been promoted as I feel I should have been. Need to learn on the job and then study the books so it makes sense. The military doesn't really rate you on your performance. All we get is a pat on the back and no raises or promotion as in the civilian side.

9. Does society respect your talents and skills?

Yes, but there are a few that don't.

10. Has the quality of work improved or declined during your career? (experiences?)

Declined, it was better years ago.

11. Do you take the job home with you?

Yes, I think about the next days work or future designs ahead of time.

12. How does your family feel about your profession?

They love it and wish I could stay in the military longer. I'm being forced to retire and they don't want to go.

13. What could your boss do to make you get out of the service?

Nothing.

14. What could management do to make you get out of the service?

Nothing, but when I was younger they were always riding me.

15. Whose job opinion means the most to you?

Younger airmen, I like to talk and listen to them. I think training them is one of the most important jobs.

16. How should a good supervisor manage a crew?

- Let them do their job
- If mistakes are made pull them aside and help them out.
- Good supervisor can go away and work will still get done

17. What makes a crew perform well together?

Everyone giving ideas but there is only one boss.

18. What are the reasons for poor crew performance?

- Too much bickering between members and the boss just lets it go
- People who don't have the skills to do the job
- Supervisors who don't know the job very well
- Skill level of the craftsmen doesn't always tell you if they are any good or not

19. Does your boss restrict you in your work capacity?

They use to but in the last five years it has gotten alot better.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Most of the time.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

At a certain level its good, Airmen shouldn't have the right to choose as much as more experienced people.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Military, when I had a civilian boss they thought everything should go their way and they didn't recognize the military structure or rank at all.

23. Do you make more or less than your civilian counterparts with the same experience?

Less.

24. Does this create a problem at all in your workplace?

No

25. Do all the base closures and defense spending cuts bother you at all?

Yes, I just came from a great base that had to close.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

It has some good points, but you still need to keep the military structure alive.

28. Do you think social functions add to job satisfaction?

Yes, at the shop and squadron level.

29. Does it bother you when civilians get bonuses and the military members do not.

Yes, it doesn't make much sense.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire – Military Craftsmen

1. What is your name?

Military #5, Senior Airmen

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Electrician

3. How long have you been a _____?

6 years

4. Why did you become a _____?

AF stuck me there against my will.

5. What gives you the most job satisfaction?

Completion of a job and recognition for a job well done.

6. What gives you the most job dissatisfaction?

- Being pulled off a job before completion
- No recognition
- Inability to do a job due to lack of materials, tools, or manpower
- Not being given enough time to complete a job

7. How enjoyable is your work?

I do enjoy my work mainly for reasons of being able to make decisions and solve problems. I like creating something. Sometimes I don't think I am being fully utilized and this leads to boredom.

8. If you could do it all over again would you choose this profession?

No.

9. Does society respect your talents and skills?

Yes.

10. Has the quality of work improved or declined during your career? (experiences?)

Both, with cut backs there is less experienced people to learn from and also more big jobs are now being contracted out. We can't get better if they don't let us do the job. One good thing is people who didn't want to work were able to get out.

11. Do you take the job home with you?

Yes, because there is less people a lot of paper work and research is done at home.

12. How does your family feel about your profession?

They like it.

13. What could your boss do to make you get out of the service?

No recognition of work done well. But I have a family to support and I can't afford to quit.

14. What could management do to make you get out of the service?

Cut my pay.

15. Whose job opinion means the most to you?

Mine and the shop supervisor.

16. How should a good supervisor manage a crew?

- He should know the job
- Have the materials ready to do the job
- Let his people have a say in what to do
- Trust his people
- Know his people's limitations

- Not micro manage his people

17. What makes a crew perform well together?

Heart and spirit, a common bond, and minimal leadership intervention.

18. What are the reasons for poor crew performance?

Personal differences, no will to succeed, and no leadership at all.

19. Does your boss restrict you in your work capacity?

Yes.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Civilian, no.

23. Do you make more or less than your civilian counterparts with the same experience?

Less.

24. Does this create a problem at all in your workplace?

Benefits make up the difference so it doesn't matter.

25. Do all the base closures and defense spending cuts bother you at all?

Yes, big time. I want job security, why should I stay at a job with no future.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

I like it, but it is another name for some other program that the AF did not continue on with.

28. Do you think social functions add to job satisfaction?

Yes, all levels but mainly at the shop.

29. Does it bother you when civilians get bonuses and the military members do not.

yes.

30. Do you expect to get a raise every year? If so, why?

Yes, and more than a couple of pennies.

Interview Questionnaire -- Military Craftsmen

1. What is your name?

Military #6, SSgt

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Electrician

3. How long have you been a _____?

18 years

4. Why did you become a _____?

It was my 5th choice and this is where the AF stuck me.

5. What gives you the most job satisfaction?

The many specific craft that come with the electric field, such as alarm, traffic, lights, fiber optics, and robotics.

6. What gives you the most job dissatisfaction?

Not being able to continue in the alarms craft. I was forced to go back to electrical.

7. How enjoyable is your work?

I would like to have gone to more schools but the jobs has its rewards upon completion. I like using my hands and mind together.

8. If you could do it all over again would you choose this profession?

Yes.

9. Does society respect your talents and skills?

Most definitely.

10. Has the quality of work improved or declined during your career? (experiences?)

Improved with more knowledge.

11. Do you take the job home with you?

Sometimes.

12. How does your family feel about your profession?

Very high feeling in the family.

13. What could your boss do to make you get out of the service?

Being forced to get out of the military earlier than planned might make me quit.

14. What could management do to make you get out of the service?

Take all our benefits away and no raise in pay.

15. Whose job opinion means the most to you?

The most intelligent answer for that moment.

16. How should a good supervisor manage a crew?

- Brief the purpose and goal of the job
- Ask for other inputs and opinions
- Have a backup plan
- Record the results

17. What makes a crew perform well together?

Cohesiveness, teamwork, and a feeling of accomplishment after its done

18. What are the reasons for poor crew performance?

Lack of communication and a bad leader.

19. Does your boss restrict you in your work capacity?

No.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Civilian.

23. Do you make more or less than your civilian counterparts with the same experience?

Less.

24. Does this create a problem at all in your workplace?

Yes because of added task on the military.

25. Do all the base closures and defense spending cuts bother you at all?

It bothers me to see them close because it adds to the unemployment and weakens the national defense.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

I like it, we need to allow the workers to give more feedback.

28. Do you think social functions add to job satisfaction?

Yes, shop level is best.

29. Does it bother you when civilians get bonuses and the military members do not.

Yes.

30. Do you expect to get a raise every year? If so, why?

Yes, cost of living.

Interview Questionnaire -- Military Craftsmen

1. What is your name?

Military #7, SSgt

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Electrician

3. How long have you been a _____?

10 years

4. Why did you become a _____?

It was one of my choices because I like to work outside an office and I like working with my hands.

5. What gives you the most job satisfaction?

I like doing minor construction work. I like starting and finishing a job. I also like planning a job and then seeing it all the way through.

6. What gives you the most job dissatisfaction?

Parts, parts, parts. I have been to six bases and it is so hard to do a job with the wrong parts. It can sometimes take up to a half day looking for parts. I like to do things correctly, but it is difficult when there is no parts or we have to substitute. Another biggy is "tools," one out of six bosses had good tools for me to use.

7. How enjoyable is your work?

I love being an electrician. I should say interior, I am not happy with the combining of exterior with interior, but my job is rewarding. I learn something weekly which keeps me on my toes. I like working outside and on big jobs.

8. If you could do it all over again would you choose this profession?

Yes.

9. Does society respect your talents and skills?

Yes.

10. Has the quality of work improved or declined during your career? (experiences?)

It varies between bases. I think the reason has to do with parts, tools and people (supervisor). If the supervisor has a good, motivated attitude. It is hard to do quality work without proper parts or tools.

11. Do you take the job home with you?

No, when I was younger I did, but I have learned not to anymore.

12. How does your family feel about your profession?

They support me and are proud of me.

13. What could your boss do to make you get out of the service?

Not support me in my job or my decisions. I had a boss who was a micro manager, I almost got out. He treated everyone, including me, like dummies. That is too degrading for me to keep going.

14. What could management do to make you get out of the service?

Management.

15. Whose job opinion means the most to you?

Coworker or supervisor who are dedicated to the job and to the Air Force. I love my job and being in the Air Force, anyone else who shares my feeling I respect and look up to.

16. How should a good supervisor manage a crew?

- Tell us everything about the job that needs to be done, and why
- Ask what we need to do the job
- Make sure we have parts and tools to do the job right
- Then leave us alone or help but not micro manage
- Deep the same people on the job for start to finish

17. What makes a crew perform well together?

Knowledge, good personalities, flexibility!, hard workers and good humor.

18. What are the reasons for poor crew performance?

Laziness, attitude of only one way will work, bad language, personality conflict.

19. Does your boss restrict you in your work capacity?

No

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Definitely

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Military, civilian bosses don't understand military working (most of them).

23. Do you make more or less than your civilian counterparts with the same experience?

I feel we make the same because of medical and housing benefits.

24. Does this create a problem at all in your workplace?

No, I have never noticed.

25. Do all the base closures and defense spending cuts bother you at all?

Big time! I am proud to be military and hate to see it leave. It creates alot of stress for me in the future, and civilians here are very stressed about it which makes it harder to work.

26. Have you been through total quality management training (TQM)?

Yes, and believe in it 100%.

27. Do you like or dislike TQM?

I like it.

28. Do you think social functions add to job satisfaction?

Yes, shop and squadron. People are different in a relaxed atmosphere. We need to see this in order to work better together. This is the first base I've been to with no VAL and a poor Booster Club. The squadron suffers.

29. Does it bother you when civilians get bonuses and the military members do not.

Yes, we do the same job.

30. Do you expect to get a raise every year? If so, why?

Yes

Interview Questionnaire -- Military Craftsmen

1. What is your name?

Military #8, Senior Airmen

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Equipment Operator

3. How long have you been a _____?

3 years

4. Why did you become a _____?

5th or 6th choice

5. What gives you the most job satisfaction?

Enjoy digging.

6. What gives you the most job dissatisfaction?

Too much supervision and working with civilians.

7. How enjoyable is your work?

The civilian complain all the time, it was OK at first but now I am tired of it.

8. If you could do it all over again would you choose this profession?

No, I was told by my recruiter I would be a Jet Mechanic and it wasn't until I was five weeks into basic I found out different.

9. Does society respect your talents and skills?

No, they think we are stupid and they have no idea what we do. Management gives the military all the crap jobs and details because the civilians won't do it.

10. Has the quality of work improved or declined during your career? (experiences?)

Worse, now they contract more jobs out and the quality they do is worse.

11. Do you take the job home with you?

Yes, I am the only operator living in the dorm so I get called all the time after hours to do jobs. It's not fair just because they force me to live on base that I have to do all the overtime and get no credit for it.

12. How does your family feel about your profession?

I don't know, they like the AF thing but I'm not sure about being an operator.

13. What could your boss do to make you get out of the service?

I hate VIP tours where all we do is straighten bumper blocks and move planters.

14. What could management do to make you get out of the service?

I hate the move toward a more civilian atmosphere.

15. Whose job opinion means the most to you?

Sub-Foremen, he is a former military and understands the system. He treats everyone with respect and never talks down to you. He knows the job well and takes the time to explain things to you. Never treats me like I'm stupid.

16. How should a good supervisor manage a crew?

Plan the job well and not check up on you all the time.

17. What makes a crew perform well together?

Get along with people on the team and treat everyone the same.

18. What are the reasons for poor crew performance?

No material to do the job and not enough equipment.

19. Does your boss restrict you in your work capacity?

Yes, I need more equipment training on different machinery. If they don't let me have any descent jobs how am I ever going to learn.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

They never listen to us.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

I would like it but my input makes no difference at all.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Military.

23. Do you make more or less than your civilian counterparts with the same experience?

Less.

24. Does this create a problem at all in your workplace?

No.

25. Do all the base closures and defense spending cuts bother you at all?

Yes, I want to stay in but they are cutting lots of military. It doesn't make sense to stay in a job with no future.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

Ideas are good but the higher up are afraid to change and it won't work.

28. Do you think social functions add to job satisfaction?

No, none at all.

29. Does it bother you when civilians get bonuses and the military members do not.

Yes, we do the same job.

30. Do you expect to get a raise every year? If so, why?

Yes.

Interview Questionnaire -- Military Craftsmen

1. What is your name?

Military #9, Senior Airmen

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Equipment Operator

3. How long have you been a _____?

6 years

4. Why did you become a _____?

This is not what I wanted, they gave it to me.

5. What gives you the most job satisfaction?

Big jobs where you can dig without being disturbed.

6. What gives you the most job dissatisfaction?

Lack of good jobs, all the big jobs get contracted out and we have the equipment sitting in the yard.

7. How enjoyable is your work?

Too repetitious, but overall its good.

8. If you could do it all over again would you choose this profession?

No.

9. Does society respect your talents and skills?

No, people feel our job is easy and anyone could do it.

10. Has the quality of work improved or declined during your career? (experiences?)

Worse.

11. Do you take the job home with you?

I leave it now that I don't live in the dorm.

12. How does your family feel about your profession?

I don't get along well with them so I don't know.

13. What could your boss do to make you get out of the service?

Working on Saturdays to please Generals who are visiting is very dissatisfying. This is a total waste of time and money to clean up a specific route to satisfy one VIP.

14. What could management do to make you get out of the service?

Too much movement to a civilian atmosphere.

15. Whose job opinion means the most to you?

Sub Foremen, former military who understands the system. He is a good operator and trainer and I respect his talent and skill.

16. How should a good supervisor manage a crew?

Respect for the workers, know their abilities, and trust them to do the job right.

17. What makes a crew perform well together?

Want to work, respect for each other, and don't care who is civilian and who is military.

18. What are the reasons for poor crew performance?

Supervisor doesn't listen to the people.

19. Does your boss restrict you in your work capacity?

Yes, he sends civilians out on jobs to avoid a union complaint. We don't get practice on good equipment and good jobs. Civilians feel some jobs are below their status so we get to do them (sweep the streets).

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Never listen to us.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

I would like it, but it makes no difference I have to check everything with the boss.

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Military

23. Do you make more or less than your civilian counterparts with the same experience?

Less

24. Does this create a problem at all in your workplace?

Yes, I do more work and make less, it's not fair.

25. Do all the base closures and defense spending cuts bother you at all?

Military cuts bother me but not the closures. I would like to stay in but I know with the new atmosphere in the military.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

I like it but they don't listen and don't really want to change.

28. Do you think social functions add to job satisfaction?

No, military and civilians don't party well together.

29. Does it bother you when civilians get bonuses and the military members do not.

Yes, its not right.

30. Do you expect to get a raise every year? If so, why?

Yes.

Interview Questionnaire – Military Craftsmen

1. What is your name?

Military #10, TSgt

2. What is your job? Electrician, Plumber, Equipment Operator, Carpenter

Carpenter

3. How long have you been a _____?

19 years

4. Why did you become a _____?

Air Force forced me to become a carpenter and a jack of all trades which won't work. They expect me to be a carpenter and I don't want to be. I am a master welder and damn good at it, so why am I learning to be a carpenter.

5. What gives you the most job satisfaction?

I like to think and work with my hands.

6. What gives you the most job dissatisfaction?

Being micro-managed and not treated with respect.

7. How enjoyable is your work?

If I was allowed to do it the way I want it would be. I'm a loner and I work better by myself or in small groups.

8. If you could do it all over again would you choose this profession?

I would go into the welding earlier.

9. Does society respect your talents and skills?

The flight line takes better care of their people than Civil Engineering. We don't get the respect and awards we should from our own managers.

10. Has the quality of work improved or declined during your career? (experiences?)

Worse due to lack of training.

11. Do you take the job home with you?

No, not unless I need an outlet and I'm down.

12. How does your family feel about your profession?

They are ready for me to get out of the military but they love the welding

13. What could your boss do to make you get out of the service?

They need to run the AF as a civilian industry would run things. They waste too much money and don't allow the troops to have enough responsibility.

14. What could management do to make you get out of the service?

Management should lean more on the NCO's experience and talent. Many Officers have the opinion that we are craftsmen because we are stupid.

15. Whose job opinion means the most to you?

Mine.

16. How should a good supervisor manage a crew?

- Listen to their people and learn from what they are saying
- Need to act as a buffer zone from higher management (know when to say no we can't do it that way)

- Need to allow craftsmen to make decisions and learn
- Need to run the job like we are trying to make money on it

17. What makes a crew perform well together?

Respect for each other and good teamwork.

18. What are the reasons for poor crew performance?

Civilians can create a problem because there are two levels of standards. They can sit and fester and complain and not advance. If we don't advance we get kicked out of the military.

19. Does your boss restrict you in your work capacity?

Yes.

20. Has your boss acted upon your suggestions dealing with work methods, safety, etc.

Yes, let me run the shop as if it were a civilian company.

21. Would you enjoy more participation in decision making (work methods, safety, choice of the type of work and crew members)?

Yes

22. Is your boss military or civilian? If civilian, do you think your boss understands the military side of your job? Explain.

Military.

23. Do you make more or less than your civilian counterparts with the same experience?

Less.

24. Does this create a problem at all in your workplace?

No, there is badgering but overall no hard feelings. We get more recognition but they get more money.

25. Do all the base closures and defense spending cuts bother you at all?

Yes, cutting too much, benefits and activities are cutting way down. They need to focus more on athletics.

26. Have you been through total quality management training (TQM)?

Yes.

27. Do you like or dislike TQM?

It's educational but it won't work. Older members will have a hard time tossing out old philosophy. Need to make the change but it will be hard.

28. Do you think social functions add to job satisfaction?

Yes, once a month at a shop level. They should control how much alcohol is served.

29. Does it bother you when civilians get bonuses and the military members do not.

Sometimes but the military should at least get a pat on the back.

30. Do you expect to get a raise every year? If so, why?

We deserve them, but I don't expect it. What other jobs are there where they can send you anywhere at a moments notice.

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VITA

Timothy Wayne Bentley was born in Pasadena, Texas on May 24, 1968, the son of Susan L. Bentley and S. Carson Bentley. He was a member of the Boy Scouts of America for five years and received the award of Eagle Scout in 1982. After graduating from Dayton High School, Dayton, Texas, with honors in 1986, he received an appointment to attend the United States Air Force Academy in Colorado Springs, Colorado. The appointment was granted by the Honorable Charles Wilson, United States Congress. He was a one year letterman on the USAFA football team in 1987 and played on the National Championship USAFA rugby team in 1990. He received a Bachelor of Science degree in Civil Engineering from the United States Air Force Academy in May 1990. Upon graduation he was commissioned a second lieutenant in the United States Air Force and assigned to Bergstrom Air Force Base in Austin, Texas. He served three years at Bergstrom as a Civil Engineering Officer, where he was awarded the Company Grade Officer of the Quarter in July 1992. After the closure of Bergstrom the Air Force sent him back to school and he entered The Graduate School of The University of Texas in September 1993.

Permanent Address: 9 Slover Drive

Dayton, Texas 77535

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